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Vol. 1

Foreword

THE existing facilities for the publication of contributions to economic or political science have, it is believed, become inadequate; for the only journals devoted to any parts of this range of study are those of the Royal Economic and Royal Statistical Societies, and these are to a considerable extent specialist and are readily filled with weighty and important matter. There is a considerable output of work in the various departments of the London School of Economics and Political Science, which for want of an accessible vent, must be published in the inconvenient form of pamphlets or be delayed till it has reached the dimensions of a book, or remain unknown and wasted, and it is expected that this output will increase with the rapid development of the School. It may take the form of special lectures delivered by members of the staff, or of material prepared for lectures, or of preliminary studies which will ultimately have their place in a treatise; or it may be the result of work in seminars or of directed researches in one or other of the departments of the School, or may be the outcome of investigations made on their own initiative by post-graduate students. The range is as wide as that of the School's activities, from mediæval history to modern statistics, and from political philosophy to railway operation. The purpose of *Economica* is to make public work of this character.

It is proposed to issue this Journal three times a year, in January, May and October, but in a new venture it may not always be possible to attain perfect regularity. No doubt its form and the nature of its contents will be modified, as experience of the material available is obtained. It is intended to deal with new books, not by including reviews of important publications individually as they appear, but by articles on recent works in selected subjects, such as that by Mr. Laski in the present number. Lists and accounts of new books already form important features of the Economic and Statistical Journals, and it is unnecessary to duplicate them. Some pages will be devoted to notes on developments of the School which may have more than domestic interest, but apart from this, accounts of current affairs will be the concern of the old-established *Clare Market Review*, with which this Journal does not compete and which it does not in any way supersede.

It will be some time before *Economica* can become as well known as the *Journals of Studies* and other serial publications of the Faculties of Economics of America and other Universities, but it is hoped that it will receive a welcome from those who issue or are interested in these important contributions to current economic theory and history, and that like them it will find its place on the tables and shelves of libraries and common rooms.

Economics as a Liberal Education

By Sir William Beveridge, K.C.B.,
Director of the London School of Economics and Political Science.

A Lecture delivered at the opening of the Session, October 4th, 1920.

It is often said that societies, arts and human institutions generally, only reach the stage of introspection and self-criticism—of asking what they are doing and why—when they have passed their zenith and are hastening to decay. I see no sign of decay in the Science of Economics, nor any extreme senility in this particular institution in which we are gathered to-day. Yet I think we may, in opposition to the general opinion cited above, very advantageously do a little introspection at this stage of our career, and ask what is the precise value and object of the studies which we pursue.

I shall not entangle myself at the outset in any attempt to give a scientific definition of "Economics." I have used that term quite unscientifically in the title of this lecture, to denote all the subjects of study that come within the scope of the Faculty of Economics in the University of London—its full title is the "Faculty of Economics and Political Science (including Commerce and Industry)." These are also practically all the subjects taught in this School, which is habitually called the "School of Economics," though its full title is the "London School of Economics and Political Science."

These subjects include, on the one hand, "economics" in the narrower sense—the science of wealth, the study of the general methods by which men co-operate to meet their material needs, considered both theoretically and in their various practical forms of commerce and industry, transport, banking and currency, and so forth; they cover, on the other hand, the whole field of political science—the study of forms of association in states, of the functions and machinery of government, of the origin of political institutions, of the laws and the ideas or ideals underlying the laws. All these subjects are treated both historically and analytically, and with reference both to this country and to other countries. They include under the head of Geography the consideration of the main physical features of this planet and their influence on man's struggle for wealth and welfare. They include under the heads of Ethnology and Sociology the survey of the primitive and barbaric institutions of the remote past, and they stretch forward to the analysis of the most modern forms of government or anarchy in Russia and elsewhere.

All these make up the circle of the Social Sciences—the study of society and of man as a member of society. That political science is a study of man in society is obvious. For practical purposes this is equally true of economics in its narrower sense. Economics in that narrower sense is a study of man as an instrument of production, and as such is a study of man in society. It is too wide a definition to speak of economics as the science of the material side of human welfare. A house contributes to human welfare and should be material. If, however, one is considering the building of a house, the question whether the roof should be made of paper or of some other material is a question, not of economics but of the technique of house-building. On the other hand, the question whether the best way of getting bricks laid rapidly is to pay bricklayers by time and engage them by the job, i.e., tell them in effect that the more rapidly they work the sooner will they be dismissed to take their chance of employment or idleness, is an economic question. Questions of wages, employment and unemployment arise only in society.

It is as the Social Sciences that our studies here can best be regarded. It is as such that one can best judge of their place and value both as branches of human knowledge and as subjects of instruction. I propose, in relation to them, to ask you to consider three questions:

1. What is the place of the Social Sciences as a branch of human knowledge in relation to other branches?

2. What is their value and place as subjects of instruction—i.e., why should they be taught, to whom, and at what stage of education?

3. How far can they by themselves and without other studies be regarded as affording a "liberal education"?

Fifty or sixty years ago there raged a controversy as to the place in education of the natural history sciences. In the thick of that controversy, as of most other controversies of the day, was Huxley. Much of what he wrote and said has been collected, in one volume of his essays, under the title *Science and Education*, and is still well worth reading.

There is in particular one address on "The Educational Value of the Natural History Sciences," given in 1854 as part of a series by various lecturers on the different branches of science, which is most appropriate to the present purpose. In this address, Huxley first draws the distinction between the physico-chemical sciences which deal with dead matter and the biological sciences which deal with living organisms. He then points out that whatever the distinction of subject, the methods of all the sciences are the same, and meets the criticism that the natural history sciences are "inexact." Finally he emphasizes the importance of their study.

The *methods* of science, Huxley, following Mill, describes under four heads :

1. Observation of facts, and experiment, which is only a special form of observation.
2. Comparison and classification of the facts observed, leading by induction to general propositions.
3. Deduction from general propositions to facts again, so as to foretell these latter in advance of observation.
4. Verification of deductions by fresh observations.

These, he argues, in opposition to views advanced by Comte and other writers, are the common methods of all sciences. Each method is used to some extent in every study worthy of being called a science at all. The proportion in which one method or other is used no doubt varies from one science to another and one time to another. But to some extent each of them is always present, and the training of the mind in the various processes—distinct in their character and in the aptitudes which they develop—gives the science its value as a piece of mental gymnastic.

As to the alleged *inexactness* of the natural history sciences, Huxley points out that there are some propositions in natural history as exact as any in mathematics. But there are fewer of such propositions, partly because of the greater complexity of the subject-matter, so that it is harder to allow for all conditions, partly because of the comparative novelty of the study of natural history (this was said in 1854).

To illustrate the *importance* of these sciences, Huxley refers to the waste of life produced by ignorance of the most elementary laws of health. " Why is it," he asks, " that educated men can be found to maintain that a slaughterhouse in the midst of a great city is rather a good thing than otherwise ? That mothers insist upon exposing the largest possible amount of surface of their children to the cold by the absurd style of dress they adopt, and then marvel at the peculiar dispensation of Providence which removes their infants by bronchitis and gastric fever ? " In a later address he compares life to a great game of chess, which every man must play against nature—in which death and disease are the penalties of defeat ; he points out the desirability of each man at least knowing the elementary rules of the game—the moves and powers of the pieces, the methods of giving and getting out of check. No man should be allowed to grow up ignorant of the fundamental laws of nature.

Let me quote one longer passage which leads straight to our present subject :

> I do not question for a moment that while the mathematician is busy with deductions *from* general propositions, the biologist is more especially occupied with observation, comparison and those processes which lead *to* general propositions. All I wish to insist upon is that the difference depends not on any fundamental distinction in the sciences themselves,

but on the accidents of their subject matter, of their relation, complexity and consequent relative perfection. The mathematician deals with two properties of objects only, number and extension, and all the inductions he wants have been formed and finished ages ago. He is occupied now with nothing but deduction and verification.

The biologist deals with a vast number of properties of objects, and his inductions will not be complete, I fear, for ages to come ; but when they are, his science will be as deductive and as exact as the mathematics themselves.

So Huxley sums up the relation of Biology to those sciences which deal with objects having fewer properties. He then proceeds (and this is the interesting point for us) :

But as the student, in reaching biology, looks back upon sciences of a less complex and therefore more perfect nature ; so, on the other hand, does he look forward to other more complex and less perfect branches of knowledge. Biology deals only with living beings as isolated things—treats only of the life of the individual ; but there is a higher division of science still, which considers living beings as aggregates—which deals with the relation of living beings one to another—the science which *observes* men—whose *experiments* are made by nations one upon another, in battlefields—whose *general propositions* are embodied in history, morality and religion—whose *deductions* lead to our happiness or our misery—and whose *verifications* so often come too late, and serve only

" To point a moral, or adorn a tale."

I mean the science of Society or Sociology.

It is striking that nearly seventy years ago Huxley should be making so eloquent a plea for a School of Economics. But quite apart from this, is it not clear that nearly all that he says as to the natural history sciences is applicable almost as it stands to our own studies ? There are needed at most a few changes of phrase and emphasis.

The charge of " inexactness," for instance, that used to be made against the biological sciences applies even more strongly in the case of the social sciences, and for the same reasons. The social sciences deal with a subject matter yet one degree more complex and they have a yet more recent origin ; they are altogether younger and less mature. In many quarters, indeed, they are hardly yet recognized as sciences at all. Everybody has learnt to talk of the laws of nature ; many people of excellent education both in writing and in practice fail to take account of the existence of economic laws which are no less real though less simple.

I met with a striking illustration of this, recently, in one of the latest works of a distinguished author to whom most of us owe gratitude for many hours of entertainment. This work describes the doings of a gentleman of the name of Raffles Haw, and can be obtained for 2s. at any railway bookstall.[1] Raffles Haw discovered how to change all metals into one another and so ultimately into gold and thereupon proceeded to become immensely rich. His output of gold was at the rate of something over two hundred million

[1] *The Doings of Raffles Haw*, by Sir A. Conan Doyle.

pounds a year. His biographer dwells quite properly on the scientific marvel involved in the transmutation of one metal into another and has the usual plausibly scientific explanation of how it is done. He pays no attention to the equally great economic marvel involved in transmuting so excessive a quantity of gold into wealth. Yet there are economic laws to be overcome here, as definite as those which impede the change from one metal to another. The one quality that more than any other gives gold its special value is its scarcity. Raffles Haw's output of gold is rather more than eight times the average annual output of the whole world through the latter part of the nineteenth century and is much more than twice the maximum output ever achieved in a single year. Additional production at this rate would destroy the scarcity of gold ; it would first send the prices of all other commodities as measured in gold, sky high, and then in a very short time put gold out of action altogether as the basis of currency. All the nations of the world would take either to using paper or to limiting their coinage. In real life Raffles Haw might soon find it profitable to turn his gold back into lead again. In the account of his doings which has come down to us there is no hint of these difficulties ; by the simple device of employing seventeen different brokers he is able to let loose a deluge of gold on the market without affecting its value.

The mere multiplication of the circulating medium is not really an avenue to prosperity ; if it were, Russia, Austria and the other slaves of the printing press would now be the richest countries in the world. If, therefore, any of you here have discovered Raffles Haw's secret, let me give you one word of advice : I do not say that you have not made a very notable and a lucrative discovery, but if you want to make the most of it you must practice " ca' canny," and restrict your output. You should aim rather at a modest competence among millionaires than at infinite wealth.

That is one interesting illustration of the different degrees of recognition now afforded to the study of the laws of natural science and of economic science respectively. Another, which has also recently come to my notice and has perhaps more serious consequences, is that, whereas there is a large and well-endowed Scientific and Industrial Research Department which can provide money for research in natural science, that same department is expressly prohibited from assisting research in economics.

I say this in no spirit of complaint. Economics, as one of the youngest sciences, has still to make its way in the world. It is the business of economists to justify their study by its methods and results ; to show that they have a subject matter to which the methods of science can be applied successfully.

That these methods are in fact applicable and necessary is, I think, clear. We have only to consider a few typical problems. There is, for instance, the phenomenon of cyclical fluctuation of commercial and industrial activity, with its attendant consequences,

in all the main industrial states of the modern world. It is our business to observe the phenomenon, to collect, classify and compare all the facts, to work up from those to general propositions concerning it, and infer its cause, or causes, to make deductions if possible in advance of observation, and to get these deductions verified by the course of events. In doing that we shall have to make a distinction common in the physiological sciences and come to a conclusion whether that fluctuation is to be regarded as functional—a normal process of industrial life which can only cease with life itself, or as pathological—a disease which we may attempt, not merely to alleviate, but to abolish.

There are other sets of problems of great urgency to-day : " What are the conditions of employment, remuneration and management of man that make for or against a high output respectively ? " or again, " What are the conditions under which we can hope to secure a stable measure of value ? " Turning from the economic to the political field, we have, in national politics, the issue between government on the basis of local representation and government on the basis of trade representation ; in international politics we have the issue between divisions of states on a national or a trade basis.

I mention these typical problems amongst many others not mainly because they all raise issues of vast practical importance to-day, but because each manifestly requires treatment on scientific lines—by the patient accumulation of facts and by reasoning on the basis of facts.

The social sciences must use the same four scientific methods—observation and experiment, comparison and classification leading to general propositions, deduction leading from general propositions and verification. Mere accumulation of facts is not science. Mere deduction from one or two narrow premises is not science. The extent to which particular methods are used naturally varies. The scope of direct experiment and of verification by experiment is very limited in the social sciences. So for that matter is it limited in the case of Astronomy. Most astronomers would be prepared to predict with some assurance the probable consequences of stopping the rotation of a planet or of speeding up its rate of revolution round the sun. No astronomer has fortunately been able to verify his predictions by an experiment on the earth.

But experiment only means observation under artificially simplified conditions, such as would not normally occur in nature. During the war we have had in the Social Sciences a great deal of abnormally simplified experience which may be regarded as experiment. One or two illustrations will make this clear.

In modern democracies the problem of administration is complicated by the need for getting and keeping public consent on questions of policy. We have had in the war a whole series of experiments in administration with this complicating element eliminated ; public opinion could largely be disregarded because public assent could be

assumed. We have as a consequence learned a great deal as to the technique of administration.

Again we have seen what happens when the supply of labour for once falls short of the demand for it—how different methods of engagement, remuneration and management and the whole position of labour are affected by the changed conditions.

Finally, we have had Lord Rhondda's great experiment in rationing. In speaking of this I do not refer to it as an experiment in administrative methods; it may well be hoped that the same administrative problem will not recur for solution. The most interesting side of rationing was perhaps the light which it threw on the psychology of the British people. Lord Rhondda for many months hesitated to enforce rationing; he feared that the public would never submit to being tied to one retailer for all their purchases and being limited in the amount they could buy. His fears proved groundless. The event showed that the British people were prepared to submit to any and all restrictions so long as they were applied equally to everybody. The experiment seems to show that of the two master passions of democracy—love of liberty and love of justice—the latter is with the British people the stronger and deeper, and will be dominant if the two ideals come into conflict. It is easy to think of other races with whom the same experiment would give a different result. That is one great lesson of this war. It is a lesson which partisans in other controversies might find well worth while to lay to heart; in the temperance controversy it has a moral for prohibitionists and anti-prohibitionists alike.

This, however, is a side issue. A more important practical distinction between the sciences arises from their relative age and maturity. The biological sciences, as Huxley points out, are more in the inductive stage than the mathematical and physico-chemical ones. The economic sciences must for the present be more inductive still. There was a time when the natural sciences had to be freed from the purely deductive method. The chief discredit of political economy in the past has been due to premature deduction on too narrow a basis of fact and of induction. Thus we had the "Malthusian principle of population," which is not based on any accumulation of facts at all. We have the assumption that higher wages necessarily mean a higher cost of production. We had the "Wages Fund Theory" and the argument that it was mathematically impossible for Trade Unions to raise the wages of the working classes as a whole. All these are exploded doctrines based on insufficient previous investigation of the facts. Now economists, if they are to get full recognition for their science, must treat it as a science based like others on observation of facts, never forgetting that their ultimate aim is the making of general propositions, not the collection of facts, but being content if necessary to postpone for a while the attainment of that aim.

Finally, we have to consider the importance of the social sciences.

Huxley himself, as may be seen from the passage already quoted, fully recognized this importance. Another striking passage occurs in his address at the opening of the Mason Institute in Birmingham. There he defends the rule of the Institute which prohibited the giving of " mere literary instruction and education," but at the same time expresses a wish to widen the scope of the Institute by adding provision for " the teaching of sociology."

> If the evils which are inseparable from the good of political liberty are to be checked, if the perpetual oscillation of nations between anarchy and despotism is to be replaced by the steady march of self-restraining freedom, it will be because men will gradually bring themselves to deal with political as they now deal with scientific questions, to be as ashamed of undue haste and partisan prejudice in the one case as in the other, and to believe that the machinery of society is at least as delicate as that of a spinning jenny and as little likely to be improved by the meddling of those who have not taken the trouble to master the principles of its action.

If there were any controversy now as to the place and the importance of the studies which we pursue here, there is no doubt that Huxley would have been vehemently on our side of the controversy. If it is desirable that each man should know the fundamental rules of the game that he has to play against nature, it is not less necessary that he should know something of the rules of the game that he has to play with his fellow men.

Indeed, the case both for study of, and for instruction in, the social sciences is now stronger than it was in Huxley's time, and perhaps even stronger than the case for the study of the natural sciences.

In the first place, natural science can largely be studied for the whole community by a specialized class. It is not necessary for all to know scientific causes ; we can accept the results of those who do know. We can take it from the scientific man that a slaughter-house in the midst of a great city is unhealthy and that babies who are not properly clothed are liable to get bronchitis and gastric fever, without making a scientific study in either case. On the other hand, almost everybody has to be an economist to some extent, as employer or employee, as voter, trader or official.

In the second place the men of natural science in the past 150 years have done their work so well that nature is to a large extent conquered. The physical obstacles to man's material prosperity—intractable materials, inclemencies of climate, distance, and the rest—are largely overcome; the natural perils to man are speedily passing out of his daily life. There was a time perhaps when the most urgent peril to man's life consisted in wild beasts. Then came cold ; then the " lightning and tempests, plague, pestilence and famine " of which the Litany makes mention. Till a century or two ago these were very real dangers. One has only to think of the smallpox and other diseases which ravaged Europe, or of the repeated famines which killed men by thousands in such countries

as France in the eighteenth century. The lightning rod is a relatively recent invention ; the safety of the seas in face of tempests has grown steadily with one invention after another. Of the perils of the Litany we had practically ceased to take account ten years ago. But are pestilence and famine gone from Europe for ever ? Look round you and look back, not ten years but three.

In 1913 a novelist entertained himself and his readers by assuming the visitation of a special kind of pestilence, a death which walked through Europe killing most men and sparing all women.[1] He followed out with great ingenuity the probable consequences of this imaginary disaster. From 1914 to 1918 the world has experienced the reality. For five years we have had in Europe a pestilence made, not by nature, but by man, sparing all women, attacking not all men, but men only in the prime of life between 18 and 45 in some countries and 17 and 55 in others—the men of military age in all the most civilized countries of the world. That pestilence has killed perhaps ten million men and maimed two or three times as many more—numbers beyond all comparison greater than any natural pestilence of which we have record.

Yet this visitation did not really spare the rest of mankind ; it has shortened by five years the lives of nearly all men and women living. They have been years spent in devising destruction and means of destruction and of measures of defence against perils which we hope may never recur. For these five years the whole human spirit has been in prison ; it has emerged groping and enfeebled. In the light of these things the more material losses from the ruin of towns and mines and factories and fields and ships and railways, appalling as they are, sink into insignificance. This has been a pestilence of man's making.

The pestilence is over, but it has left us famine. There is literal famine in Europe to-day. In states which have themselves borne a leading part in the triumphs of natural science over nature and the prevention and the cure of disease, women and children are at this moment dying or being maimed for want of food. This again is a disaster of man's making. In most countries nature this year has done well for us and given good harvests. Had the harvests been bad, the civilization of Europe might well have perished.

If we look east to Russia, or west to Ireland, we see in each case how a conflict of political ideas is destroying all the gains of natural science. If we look, not abroad, but at home, we find ourselves engaged in an apparently hopeless conflict with restriction of labour and output in the building trade and an ever-present fear of paralysing disputes in the mines.

I do not suggest, of course, that economic and political science can find complete cures for these evils. But it can certainly lessen them.

[1] *Goslings*, by J. D. Beresford, now reprinted under a new title as *A World of Women*.

One may say, for instance, without hesitation that no body of persons with any understanding of economics, or of how men have reached and maintain their present standard of material wealth, could have made quite that "settlement" of Central Europe which is written in the Austrian Peace Treaty. We can claim also that, in dealing with many minor problems—the cost of living, the true basis of wages, the cyclical fluctuation of trade—the contribution which economic science could make to human welfare is immediate and direct. We may say finally that no body of men could now make a greater contribution to the preventing of future wars and so to saving human life, than economists and students of politics could do in showing the true costs of the present war, and the inter-dependence of nations.

It should be needless, however, to dwell on these specific points. The general importance of the social sciences, coming in their order of complexity and time after the physiological ones, is manifest. The main danger to man and to his civilization now comes, not from nature, but from man's own warring passions and ideals ; his most urgent study is not nature, but himself.

In one of the most famous of Plato's Dialogues, the *Protagoras*, there is a discussion as to the relative places of the social arts and sciences and all other arts and sciences, and as to whether the former (Plato calls them virtues) can be taught. Protagoras, as the chief person of the dialogue, illustrates his point of view by a story as to the origin of mankind and of society.

The story tells how, when mankind and mortal creatures were being created, the gods commissioned Prometheus and Epimetheus to equip them and to distribute the various qualities required by each ; how Epimetheus took on the job by himself and proceeded to give away all the qualities—strength, speed, power of flight or burrowing, long hair, thick skins, hoofs and teeth and claws—to the animals, so that when he came to man he had nothing left to give and was terribly perplexed (he was a dull as well as a presuming person) ; how Prometheus, coming to inspect the work, found man naked, shoeless, without either bed or arms of defence, and tried to save the situation by stealing for him from Heaven the mechanical arts of Hephaestus and Athene and fire with them, "for without fire the arts could neither have been acquired nor used."

> Thus man had the wisdom necessary to the support of life, but political wisdom he had not ; for that was in the keeping of Zeus, and the power of Prometheus did not extend to entering into the castle of heaven, in which Zeus dwelt, who, moreover, had terrible sentinels ; but he did enter by stealth into the common workshop of Athene and Hephaestus, in which they used to practise their favourite arts, and took away Hephaestus' art of working by fire, and also the art of Athene, and gave them to man. And in this way man was supplied with the means of life. But Prometheus is said to have been afterwards prosecuted for theft, owing to the blunder of Epimetheus.
>
> Now man was not long in inventing language and names ; and he also constructed houses and clothes and shoes and beds, and drew sustenance

from the earth. Thus provided, mankind at first lived dispersed, and there were no cities. But the consequence was that they were destroyed by the wild beasts, for they were utterly weak in comparison of them, and their art was only sufficient to provide them with the means of life, and would not enable them to carry on war against the animals : food they had, but not as yet the art of government, of which the art of war is a part. After a while the desire of self-preservation gathered them into cities ; but when they were gathered together having no art of government, they evil intreated one another, and were again in process of dispersion and destruction. Zeus feared that the race would be exterminated, and so he sent Hermes to them, bearing reverence and justice to be the ordering principles of cities and the bonds of friendship and conciliation. Hermes asked Zeus how he should impart justice and reverence among men : should he distribute them as the arts are distributed ; that is to say, to a favoured few only, one skilled individual having enough of medicine or of any other art for many unskilled ones ? Shall this be the manner in which I distribute justice and reverence among men, or shall I give them to all ? To all, said Zeus ; I should like them all to have a share ; for cities cannot exist, if a few only share in the virtues, as in the arts. And, further, make a law by my order, that he who has no part in reverence and justice shall be put to death, for he is a plague of the state.

And this is the reason, Socrates, why the Athenians and mankind in general, when the question relates to carpentering or any other mechanical art, allow but a few to share in their deliberations ; and when any one else interferes, then, as you say, they object, if he be not of the favoured few, and that, as I say, is very natural. But when they come to deliberate about political virtue, which proceeds only by way of justice and wisdom, they are patient enough of any man who speaks of them, as is also natural, because they think that every man ought to share in this sort of virtue, and that states could not exist if this were otherwise. I have explained to you, Socrates, the reason of this phenomenon.[1]

That, with a difference of wording, sums up most of what I have attempted to say. Man cannot be saved by the natural sciences and the arts alone. He must learn in addition what the translators of the *Protagoras* have hitherto called reverence and justice ; what I venture to describe to you as economics. Without this his other learning ends in self-destruction. The nineteenth century—the age of engineering—led the world to the war of engineers.

There is, indeed, little that is fanciful in using Plato's own words. He would himself have attributed the origin of the war to lack of " reverence " in the leaders of the German people, to a spirit of insolence and of disbelief in any power or law higher than the supposed interests of their own nation. He would have seen in the end of the war the inevitable nemesis that waits on insolence. He would have noted that the world's greatest need now is for justice, for the setting up of new standards to determine each man's and each nation's rights and duties, now that the old standards are swept away.

Reverence and justice in Plato's myth come to man after the arts and the natural sciences. They come by a special channel of their own. They must be imparted not to a few but, if possible, to all the citizens. So we may say that after Prometheus and Epimetheus

[1] *The Dialogues of Plato*, translated by B. Jowett. Vol. I.

had given to London, University College and King's College and many other institutions, Hermes (at that time a distinguished member of the London County Council) was commissioned to establish the School of Economics.

The myth from the *Protagoras* had already taken me from the first to the second part of my subject. It has dealt, not merely with the importance of the social sciences as branches of human knowledge, but also with their place as subjects of instruction, that is to say, with the persons to whom they should be taught.

We may, I think, agree at the outset that these studies should be seriously undertaken only at the university stage. I do not mean that much more could not be done than is now done, by the teaching of history and of the elementary facts of social life, to prepare boys and girls, while still at school, to become good citizens later. But I am not inclined, at the moment at any rate, to suggest economics as a suitable part of an ordinary school curriculum. It should come in at the university stage. As such, like most other branches of university teaching, it has both a special and a general function.

It is not the case, as seems sometimes to be assumed, that universities do not or should not train men for particular avocations. From the earliest times they have always done so. Together with their general faculty of philosophy, they have had the special faculties of law, medicine and theology—training men for the three learned professions. Even the Oxford " Greats " course had its mundane uses, as a direct training for the more solemn forms of journalism, and as a passport to the Higher Civil Service.

Looking at the matter this way, one can see at once that economics, as defined above, is, amongst other things, a training for a new learned profession of immense and of growing importance, namely, that of public administrators. I include under that name not only civil servants properly so called, but the members and officers of local authorities, the officials of employers' and workmen's associations, and even members of both Houses of Parliament. The course for the degree of B.Sc. in Economics seems specially devised for this purpose. The training of such men has always been one of the main objects of the School and no words are needed to emphasize its growing importance.

Quite recently there has been instituted in the same Faculty of Economics a new degree—that of Bachelor of Commerce. This is nothing more nor less than the recognition of yet another learned profession, that of the business organizer ; it represents the view that the great man of business who is consciously to serve the community as well as himself can be better fitted for doing so by learning to take a liberal view of his work. It may be a shock to some business men to be called members of a learned profession. That, however, is what they are or ought to be.

For these two lines of life men are trained here, as in the older

faculties they are trained for law, medicine and theology. While, however, the Faculty of Economics is to this extent a specialist faculty, it stands also for a general study in which all should share to some extent. It represents an attempt to teach the arts and implant the virtues by which societies are kept together, to bring each man into harmony with his human environment, to give an understanding of the nature of society and of the bonds which unite man to man, a sense of proportion as to one's own claims and services in relation to those of others, and a sense of law in the social as well as in the natural world—the " reverence " and the " justice " of which Protagoras speaks. In this sense some understanding of economics is an essential part of the complete education of a citizen, whatever else he may or may not be taught. Everybody is concerned with economic and political science in practice, and his practice will be bad unless it is guided by insight.

The answer to the second question which I propounded at the outset is, then, as follows : The social sciences which have been loosely referred to here as " economics " should be taught mainly at the university stage. A full study of them is a training for one or other of the new learned professions of public administrator and business man. The elements of them should enter into every truly liberal education.

Third, and quite distinct, is the question how far economics can by itself, and without other studies, provide a sufficient liberal education.

In considering that question we must have regard to the limitations of human capacity. It is difficult to say of any course of education that it could not be improved by some addition. The student, if he can really absorb that addition, will also be improved. A perfect education should include all branches of human knowledge. John Stuart Mill advocated a thorough study both of the ancient classics and of the natural sciences as essential to a liberal education, and as being well within the powers of all men if properly taught. But Mill himself was an infant prodigy. He states in his *Autobiography* that he could not remember when he first began to learn Greek, but that he had been told it was at the age of three years. He adds regretfully that he learnt no Latin till he was eight. By that time he had read many Greek authors of whom first-class classical students of to-day are ignorant. He argues that there could be no difficulty in combining the thorough study of classics with an equally thorough one of natural science.

Few will agree with him. For most people, real understanding of and benefit from the classics alone, without any natural science, is an impossibility. The majority even of those who under compulsion study the classics find them too hard and fail to get real education from them ; they are exhausted by the preliminaries of grammar and never get to the literature and the humanities.

To judge such a course of studies as that for the B.Sc. in Econo-

mics, one must compare it, not with an ideal education for a race of supermen, but with other university courses—in philosophy, history, natural science, mathematics, literature, law or medicine —which have been found to be within the powers of ordinary persons of good school education. There is no need to fear such a comparison. Consider for a moment first what the course includes. In the first year when working for his intermediate examination, the student must acquire the elements of five main subjects : economic theory and its application to the problems of foreign trade and currency ; the outlines of recent history, general and economic ; geography ; the political constitution of the United Kingdom ; and either mathematics or logic. In his second and third years he has certain compulsory studies—as a rule more economics and statistics ; more history ; the politics and public administration of this and other countries ; and the history of political ideas. He must take one of a list of special subjects which include advanced economic theory ; advanced statistics ; economic history ; sociology and ethnology ; international law and transport. This is certainly not a narrow education ; the more I consider it the more am I impressed with the wisdom and broadmindedness of those who framed it. It is a liberal education, if there is any such thing in the world of universities.

What are the objects of a liberal education ? Broadly they are two—the training of the mind and, above all, of the reasoning faculty, and the bringing the student to an understanding of and so to harmony with his environment.

The training of the mind.—Just as every citizen needs reading and writing, so every well-educated citizen, one who is to count for more than one of the community, to advance knowledge or in other ways to influence hundreds, perhaps millions, of others, must have certain general faculties—method, accuracy, power of concentration and a logical habit of mind. To get these he must submit his mind to mental gymnastics, just as to get strong and efficient muscles he must go through bodily gymnastics. He must do hard mental exercises even when he thinks them dull or finds them tiring. These mental gymnastics are a special function of such studies as logic, or economic theory, or statistics. And they are, or can be, made at least as good for the purpose as mathematics or any of the natural sciences. They fall behind the latter only in respect of the training of hand and eye as well as mind which comes from practical experiments.

The understanding of one's environment so as to be in harmony with it.—Here economics leaves most other branches of study far behind. The dominating element in man's environment to-day is not nature but his fellow-men. Economics, theoretical and applied, history, political science, sociology and the rest are so many explanations of our human environment.

So it can be said for economics that as a liberal education it can

challenge comparison with almost any other course of study at any university. A sense of proportion, however, compels us to remark on two deficiencies.

The first deficiency is the omission of all arts, including literature. The reasoning faculty is only one part of the mind. There are other faculties which need training also. This is a gap which cannot well be filled by the formal education of a school of economics—it is one which the students should try to fill for themselves. Those who study economics in school hours should endeavour to study something else outside. They can do this individually by reading, or collectively in literary and debating societies. Apart from the general benefit, they may get thereby a special benefit of learning the arts of expression and style. One of the reasons which have led me to dwell so much upon Huxley and his writings is that he was pre-eminently a man of science who could express himself well and who took the trouble to do so. His essays are still a joy to read, as his mind is a delight to know. I am afraid one must admit, as a special difficulty of economic students, that style and clearness have not hitherto been a very strong point of economic writers, so that many of those who must be studied as economic authorities cannot, at the same time, be taken as examples in the art of expression. There are, of course, brilliant exceptions, but the truth in many economic writings is overlaid by much barbarous terminology.

The advice, therefore, that I would give to students of economics above all things is to pay attention to this business of expression. I do not mean that you should take such a book as Stevenson's *Art of Writing* and try to introduce his rhythms into your examination papers. I confess to a great deal of doubt as to the practical value of Stevenson's *Art of Writing*, even to Stevenson himself. The practical advice that I would give is, first, that you should take real trouble to make your meaning clear in the essays which, as part of your course here, you have to write, and, second, that you should take every opportunity of reading good writers with a rich and flexible vocabulary so as to increase your store of language. Huxley himself is admirable for the purpose ; so, of course, are such writers as Stevenson himself, whether in his books or in his letters, Macaulay, Gibbon, or any of the English classics in prose or verse.

The second deficiency of our teaching here is the weakness which it shares with all other education in schools and universities, namely, that it is not life. Artificial education should be an anticipation of natural education ; it should try to teach us beforehand, and without tears, as much as possible of what otherwise we shall be bound to learn by experience and with the pains of experience. But however well devised, there is one thing which artificial education cannot teach, and, indeed, by its very nature tends to teach wrong, namely, the true importance or unimportance of the intellect in human affairs. What we do for you here, what all educational

institutions do for their students, is to lay stress upon the value of intellect ; but character, personality, the power of inspiring confidence and securing affection and co-operation, are really more important qualities both for happiness and for worldly success. I know you do not believe this now ; no keen student at a university does ; it cannot be learned from teachers and books. Life teaches it to everybody in time, and is the only real teacher.

Meanwhile, the best substitute for the experience of independent life which is to come later, is to be found in the corporate life of the students themselves, in the making of friends, in the learning to deal with one's fellows, and in the managing of one's own affairs in such bodies as Students' Unions and Societies. That is the educational justification for the emphasis laid on the social life of a university, on its athletics, its literary and debating and political societies, its opportunities for human intercourse. All this helps to keep the mere possession of clever and well exercised brains in its right place as part of man's equipment for life—perhaps the most valuable single part and certainly the most satisfying to its possessor—but not more than a part, leaving him, if he has that only, but half a man (or woman) and certainly a bad economist.

Our review of the studies which for convenience I have called Economics, but which really embrace the whole circle of Social Sciences, leads, I think, to most encouraging results.

First, it ranks the Faculty of Economics and Political Science with those older faculties of Theology, Law and Medicine, as training men directly for the most important of the new learned professions—public administration and business organization.

Second, it shows the Social Sciences as studies of which the elements at least should be included in the education of every citizen.

Third, subject only to the reservations I have made, it justifies a claim for our studies, even standing by themselves, to be in the full sense a "liberal education," comparable to any course at any other university.

Fourth, returning to the earlier part of my lecture, and looking at the matter of our studies here rather as a branch of human knowledge than as a subject of instruction, I hope I have done something to present these studies in their true relations as one science amongst others, to be pursued and served by the same methods, and with the same relentless and laborious truthfulness : a science younger, less mature, more human and more complex, perhaps more wayward than her elder sisters, Mathematics, Physics and Biology, but perhaps also for that reason yet more attractive a mistress, and with a more urgent call upon our service.

Let me conclude with one word of warning.

For many of you your time here is a direct training for professions ; or a means of increasing qualifications for the profession you are in.

You are pursuing economics for an economic motive. There is nothing unworthy, nothing to be ashamed of in that. Equally there is nothing unworthy in making the practical results to be obtained from research one of the grounds for urging the State to endow it.

But the practical results are not the real end either for the State or for you. The State which assists only "useful knowledge" stagnates; it will miss the most useful results as well as all else. The student who asks first, last and all the time, whether a particular study will help him to earn his living, misses his opportunities and much that makes living worth while. This is a favourite point with Francis Bacon, who, whatever the value of his scientific results, was at least one of the founders of modern science and "moved the minds that moved the world." More than once he cites the story of Atalanta as a parable. She, as you all know, was fleet of foot and loth to marry. She could not refuse to be wooed, but she made it a rule that every suitor must race with her, and suffer death for penalty if he lost. Many times she won; at last she was defeated, not by fair speed, but by the cunning of a competitor who provided himself with three golden apples, which one after another he threw in front of her as she was passing him. She stopped to pick them up, lost ground on each occasion, and was beaten on the post. So science if it turns aside to clutch at immediate gain is lured from its true path and loses the race.

Elsewhere, in speaking of the errors which block the progress of science, Bacon has a famous passage:

> But the greatest error of all the rest is the mistaking or misplacing of the last or furthest end of knowledge: for men have entered into a desire of learning and knowledge, sometimes upon a natural curiosity and inquisitive appetite; sometimes to entertain their minds with variety and delight; sometimes for ornament and reputation; and sometimes to enable them to victory of wit and contradiction; and most times for lucre and profession; and seldom sincerely to give a true account of their gift of reason to the benefit and use of men; as if it were sought in knowledge a couch, whereupon to rest a searching and restless spirit; or a terrace for a wandering and variable mind to walk up and down with a fair prospect; or a tower of state for a proud mind to raise itself upon; or a fort or commanding ground for strife or contention; or a shop for profit or sale; and not a rich storehouse for the glory of the creator and the relief of man's estate.

The liberty of spirit which a liberal education should give is at bottom liberty from the economic motive, a capacity to value things and decide upon courses of action, not because they pay, but by reference to other standards. Most of you in the greater part of your lives will be in servitude to the economic motive. Do not put on the bonds too soon or too tightly now. You will have occasion enough later to ask of any and every course of action whether it pays. In these university years, get all the degrees and diplomas and specialized knowledge you need to help you in your careers. But do not make that the only aim. Treat those years

also to some extent at least as an irreplaceable opportunity of learning to do things, not because they pay, but for their own sake ; of making life-long friendships among men and books ; of gaining that indefatigable thirst for knowledge which is the least exhaustible, though not the richest, source of human happiness, and is least affected by the changes and chances of mortal life, by loss of fame or health or fortune, by the death or estrangement of friends.

The Group System in France

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I.

When a country has accepted the principle of popular government, through the medium of a Parliamentary Executive, it becomes important to consider the mechanism by which the governmental power wielded by the parliamentary executive is controlled by the people and the representative assemblies. France is such a country, and it is instructive to notice how her politicians organize themselves, in Parliament and in the country, to control the action of the Executive and the making of laws. Does the machinery by which the popular will—as far as it can be discovered at elections—is supposed to reach through to the governing knot of men, really accomplish its supposed purpose?

In England, until recently, that machinery resolved itself into Government by the Two-party system, i.e., both inside and outside the House men give their allegiance and support to one of two great parties, each of which has a separate and distinct political belief and programme. In England one party has formed the Government, and the other party, the Opposition, has been ready to take the Government's place immediately it lost the confidence of the Electorate and the House. In this way the policy that has received the support of the electorate has commanded the House of Commons.

In France, however, there is a very vital difference. There are no great organized parties, with publication offices, little caucuses in the constituencies, great funds and big federation offices in the Capital. There is seldom a united appeal to the country for or against a set of men or a well-defined policy. There is no marshalling of the forces of the Government on one side of the House, and the Opposers of the Government on the other.

Indeed, such conditions are considered exceptional in France. For example, the Socialist party is the only French party with an organization in Paris and affiliated organizations in the provinces, with definite membership conditions, a definite programme, and a conception of loyalty and discipline.[1] The others are only half organized. Only since the beginning of the century have party organizations in the English sense of the word, shown signs of life. Before that time (and to a less extent the same is true even now) the

[1] See *International Review*, September, 1919. Professor Aug. Hamon on political conditions in France.

parties " were before anything else a mass of ideas, a body of economic and social doctrines more or less harmoniously grouped in a homogeneous and coherent whole. At election times there existed nothing but ephemeral electoral organizations without any close connection between them." [1]

The reason for this is probably to be found in the psychological make-up of the French people. They are noted for their passion for ideal justice and make that passion the basis of their politics ; they have an intense dislike for compromise, are vehement and fierce in their political sympathies and antipathies. They do not accept the fiat of a leader as the average English politician seems to do. Movement, pose, dash, are their tactics. For example, it is said that, " For some time past, passive obedience to the leaders is robustly combated by certain minds which will not abdicate their rights of free discussion. They substitute, for the blind and definitive confidence once accorded to the directing men, reflecting and momentary adhesion to those of their ideas or to those of their projects which seem to them wise and opportune, useful to the country and favourable to the party." That is to say, the French politician is not a good party man. Bryce says somewhere that the good party man is he who stands by his party when it is wrong. The tendency is for Frenchmen to leave when the party is wrong. [2]

When from 1899-1906 a Republican-Radical-Socialist *bloc*—all the groups of the Left—was formed to carry important measures, and kept two ministries in power (Waldeck-Rousseau and Combes), each for the unexampled period of about three years, this was considered a most extraordinary phenomenon. Though it did such important work as securing the passage of the Associations Law and the Ecclesiastical legislation, there were anxious outcries against it. The " delegation of the Left Groups " was accused of becoming the Ministry ; the Ministry was being oppressed by these self-made dictators ; and people talked of " those unfortunate days when the delegation was a substitute for the government and the legislature." [3]

II.

What, then, are the characteristics of this Group System ?

In the first place, instead of well-marked parties, the Chamber of Deputies is composed of a number of small heterogeneous groups, bound by no tie of policy to each other, but rather passionately hostile on principle and detail. Secondly, no great Party Leaders exist, but here and there are a few brilliant men—there are captains

[1] Jacques, *Les Partis Politiques sous la IIIme Republique*, Paris, 1912, p. 29.
[2] *Op. cit.*
[3] See Esmein, *Elements de Droit Constitutionel*, edn. 6, p. 257 ; and Dell, *My Second Country*, p. 136.

without followers, and very often big bands of soldiers with no chiefs.[1] Indeed, the Republican-Radical and Radical-Socialist party, the largest Parliamentary group for many years until the elections of 1919, had to go frequently outside its own group of members to give support to other men as ministers. This absence of party leaders is a very striking difference between the French parliamentary organization and the English system.

Thirdly, within the House the groups sit in a semi-circle facing the Tribune from which the members speak. The great party names of Liberal and Conservative, Republican and Democrat, or the all-inclusive Government and Opposition, are not the great marks of political difference in France. The groups are classified, in the first place, according to where they sit. On the *Left* are the Liberals of all shades, from the Revolutionary Socialists to those members who think that reform is good sometimes. In the *Centre* are the groups that sway this way or that according to circumstances: they have a distinct political belief, and strive to achieve "*le juste milieu.*" On the *Right* are the Conservatives and the Monarchists, some of whom are still as irreconcilable to the Republican form of government as are many of the Socialists to the present economic organization of the world except that in Russia. Further than this, the groups within the broad denomination of Left, Right, Centre, Left Centre, Extreme Right and Left, etc., are subdivided, in policy, into smaller groups which have names which are supposed to denote their political differences. But few people can unravel the real differences, e.g., what is the apparent difference between "Independent Group" and "Group of Deputies not inscribed on any list of Groups?"

There is thus a certain confusion in French parliamentary life, a confusion which does not arise, originally, from any attempt at coalition (which is the cause of confused thinking in England at the present moment), but from actual differences of political opinion, which, though perhaps imperceptible to the ordinary person, and especially a foreigner, are yet sufficient to keep the groups in independence, openly declared immediately interest makes it pay any group or groups to express their difference openly. "There are probably very few persons in France except journalists and professional politicians who could pass an examination successfully upon the differences between the political principles and aims professed respectively by any two of the above parties, or at any rate by any two of the seven of them which are acknowledged as belonging to the Left, with the exception of the Unified Socialists."[2]

[1] "In England, leadership is very manifest, concentrated, although the democratic movement of the last forty years has profoundly changed its character. In France, leadership is less clear, less striking. It is the mass of veterans of political struggles, journalists of renown, already celebrated parliamentarians or young talented men full of promise who, by their articles in the press, their speeches at the tribune or in the country, by their reports in the preparation of very important laws, bring themselves to the general notice of the nation, and more particularly to that of their political co-religionists."—Jacques, *op. cit.*, pp. 19, 20.

[2] See *New Europe*, October 30th, 1919, p. 57.

Why have I laboured this question of confusion of groups and the lack of clear organization? It is because democracy, preoccupied with getting a living, and ill-informed on many things, must place a certain amount of trust in its elected governors. That trust can only be placed properly in a candidate who represents some body of doctrine, and who has some definite mode of attacking problems of public administration as they arise. The machinery of parties has, in Anglo-Saxon countries, provided the ordinary citizens with something simple and permanent, "something which can be loved and trusted, and which can be recognized at successive elections as being the same thing that was loved and trusted before . . ."[1] There is a label to a party, and to a party there is a clearly recognizable attitude of mind towards problems of government. In France, however, the differences between groups have so little meaning to the country at large that the candidates often present themselves to their constituencies with some vague label, and decide only after election what group they will join, or whether to form a new group altogether. In short, the demarcations of opinion within the Chamber of Deputies are hardly drawn from opinion in the country.[2] Government is carried on by men united in a Ministry made by extremely private negotiations. An English party leader would be horror-stricken to see his men leave him to take office in a new ministry composed of hostile groups; members of French groups do so without reproach.[3] There is no party discipline and an organization of Whips as this is known in England. Office in England comes from standing by your party: often in France by deserting it. This has tended to make personal considerations take precedence of political considerations in the government of France.

The elections of 1919 were fought on something like a big two-party election. This was not because the French had learnt that their method of organization might be improved, but because the issues of the war and post-war problems had set practically all parties against the Socialists. The backwardness of France in the matter of social legislation had resulted in a great outcry on the part of the Socialists, and the latter, too, had been turning towards Bolshevik political theory as an alternative to their "decadent Parliament," just as many people look with dismay at the breakdown of free Parliamentary government in England. The ordinary *bourgeois* Republicans, and especially those who are not radical in tendency, are now put on the defensive, for they have property. They were therefore determined to unite against the Socialists and Radicals. The article of the attack was—"A struggle against Bolshevism, against all sorts of dictatorships, and against all forms of violence." The anti-Socialist *bloc* won a great victory. This *bloc* supports

[1] *Human Nature in Politics*, Prof. Graham Wallas, p. 83 *et seq.*

[2] Cf. confirmation of this view in Jacques, *op. cit.*, p. 33: "Life inside the assemblies has its own laws, it is dominated by considerations of opportunity and personal arrangements, by the tyranny of the question of confidence and the fear of opening, sometimes in grave situations, a ministerial crisis."

[3] See Dell, *op. cit.*, pp. 142, 143.

M. Millerand in so far as the Prime Minister in France is now the tool of the President. Their policy is to "avoid raising questions which would divide us"—in the twentieth century, after a great war! The Unified Socialists were left with 68 seats out of 626. Outside any groups were what were called "seven wild men," "*des sauvages*," among whom was the Prime Minister, destined soon after to be President of France. This isolation in itself is a fine illustration of French group life—the Prime Minister belonged to no party: such a situation is quite normal in the organization of groups.

III.

How does all this affect control of the Ministry? The Ministers are responsible to the Chambers; more importantly, perhaps, to the Chamber of Deputies. To maintain its power the Ministry must have a working majority, and since it cannot get it from any one party or group in normal times, the groups must combine for the purpose of supporting a Ministry. They do so, after repeated conferences and negotiations between deputies and groups, possible ministers and the Presidents of the Republic and the House. On what terms? At ordinary times it is recognized that a group may withdraw its support in the House on any measure or in any debate on the question of confidence, whenever it wishes. There are no Whips to obey, no party allegiance to respect, just the whim of the group to follow.

Certain important consequences follow:

Firstly, the dependence of the Ministry in France on the Deputies is very real. Much more so than in England, where the Cabinet may threaten a dissolution and involve the members in a new election with all its cost and uncertainty of success. The Ministry in France is, therefore, bound hand and foot to the demands of the component groups. The Ministry has no instrument of retaliation, because the Chamber cannot be dissolved until its four years' tenure runs out. The Government sometimes brings forward Bills knowing that it will have to withdraw them through insufficient support in order to get the sympathy of some insistent group.[1]

Secondly, the ministers must please all the groups, so that they have to go to the extreme of compromise and accommodation to secure their support. Bribery by the offer of jobs for friends and relatives is very common. This means weak government and slack administration. That this is no imaginary evil will be seen by the

[1] See Barthélemy, *Problème de la Compétence dans la Démocratie*, p. 119. Waldeck-Rousseau (Private Papers): "We have been condemned to adopt, as a rule superior to all others, the necessity of not falling. We have had to make concessions of principle while exerting ourselves to avoid their realization. One day, to avoid downfall which menaced us through an interpellation by Klotz and Magniaude, we were obliged to introduce a measure for income-tax; another day we were forced to take sides in the question of workers' pensions. We could not establish the income-tax, nor realize actually, as it was then conceived, the measure on pensions."

following quotation from a speech by M. Millerand in answer to one of his critics when he asked the House for a vote of confidence in his Ministry :

> I have heard it said that the composition of the Cabinet has caused a certain uneasiness. If such uneasiness exists, allow me to calm it. We are not all men of one party. To serve the Republic, to serve France, I invite the help of all.
>
> I am not going to be the " prisoner " of any faction. Do you suppose that the Cabinet which is offered you, after all the lessons of the war, has any intention of engaging again in that internal discord, or of adopting those administrative practices against which more than one of us have strongly protested. This Government comes before you as one of harmony and efficient work. And what the Government is, that will its subordinates be. Prefects, sub-prefects, officials of every sort have one duty and one only—administration. There can be no suggestion that any official of any class, in any circumstances whatever, will so far lower himself as to become agent of any person or group of persons. If he does he shall pay dearly.[1]

Thirdly, since the members of the groups are bound largely by personal considerations (the possibility of getting office later), and the groups are free to desert the ministry, the ministries are very unstable. Some ministries have lasted a day : others about two years ; the average is something like ten months in office per ministry. In forty-seven years, from 1871 to 1918, there were sixty-eight ministries. Groups are formed by Deputies whose intellect and personality would never give them a chance of becoming " ministrable," i.e., possible holders of office, otherwise. Indeed, the number of groups is largely increased because Deputies will not attach themselves to those groups already existing and containing a large number of potential Prime Ministers.

Fourthly, though the Ministries change and the Prime Minister usually goes, most often about half the members join the new Ministry, and it is a common thing for a defeated Prime Minister to be succeeded by one of his own colleagues. There is much intrigue, partly as a cause, partly as an effect of this. " A change of Ministry is often nothing more than a redistribution of the parts in the same troupe of actors. They are the same who again come before the public, after having changed costume in the wings."[2] It is known in France as " the waltz of portfolios," and must have a serious effect on control of the Civil Service.

There seems to be much less loyalty among members of a Ministry in France than there is in England. As a matter of fact, good party and Cabinet government is almost impossible unless the members of the Ministry " mean the same thing," unless they really do have some common ideas on policy before they commence seeking political arrangements. One man will respect the parliamentary prospects of another if their fundamental outlook on politics is much the same, and if a common party with common traditions binds them

[1] Chamber of Deputies, January 22nd, 1920, *Political Review of the Foreign Press*, Vol. I, No. 13, p. 365.
[2] Barthélemy, *Problème de la Compétence dans la Démocratie*, p. 123.

together ; but where people join with unlike, from motives of immediate expediency, the result must be very largely affected merely by the personal sympathies and antipathies and not by a strong desire for the common welfare. Thus the true view of Party is lost. Parties should be instruments of power, and not the end of power. Personalities should enter only in so far as personal desires, ambitions, and character are instrumental in securing the welfare of the community. In fact, in France personalities do enter strongly through the group system and its underlying cause : a certain fierceness of character in politics.

The result is that legislation of any great importance is scanty, and does not command great respect ; many reforms are left untouched in such a régime, and the administration, which should be held in firm control by the elected authorities, is left to a large extent uncontrolled. This leads to a final judgment of the system : it is essentially undemocratic, for though the people elected the men, they did not elect them to do the things they afterwards do, or to form the particular combinations of groups for control of a Government that they do.

The principle that government should be by the consent of the governed by means of a Parliamentary Executive may not be accepted by all people, but where it is accepted it would be agreed, probably, that the ideal connection between the people and the executors of policy, and, nowadays, the initiators of legislation, would be close, continuous and direct, through a medium, the Ministry, immediately responsive to the most delicately expressed desires of the governed. France falls short of this ideal by a long way. In England personality is linked with measures, and what may almost certainly be the future Government comes before the nation for acceptance or rejection at a General Election. That is to say, the Ministry is made because it represents a majority. In France, through the group system, the Ministry looks out for a majority after formation, and gets to work without express popular mandate for that particular combination of men and measures. That is, the *kind* of government is remote from the opinion of the people. Instead of the policy being anterior to the grant of power, it tends to be subsequent.

Thus the French, who are intensely jealous of arbitrary power and an uncontrolled Executive, have no certain control over the central machine. Responsibility is lost where the person or body of persons who wield power cannot be definitely pointed out, where you have no great understandable Parties. Consequently the French have to look to other means to balance the evils of their particular political organization by groups, and those means, into which I cannot go now, are two : the Parliamentary Commissions and the Interpellation, both of which have obvious merits and defects. Much of the trouble arises from the fact that actually there is no one in France with the power to dissolve the House when

its proceedings are seen to be futile. The President, with the consent of the Senate, has this right of dissolution, but the power was used by Marshal MacMahon in 1877, and since then parliamentarians have been prejudiced against its use. Only a dissolution of the Chamber of Deputies on a definite issue, and an appeal to the country on a definite policy, can make a strong Parliament and a strong Government. Such a thing may be against the nature of the Frenchman ; it seems as if it is.

The Meaning of Bank Deposits

By Edwin Cannan,
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I hope I am not succumbing to the fashion of supposing a golden age in the past, but I cannot help thinking that the nature and functions of deposit banking were much better understood forty years ago than they are now. We had not then become convinced that nothing in economics can be both simple and true, and the young were taught that the theory of deposit banking was very simple. The banker was a man or a collection of men who undertook to keep money safely for its owners until they wanted it, and who made the business pay by lending out a good deal of this money to other people who wanted temporary loans.

The *Political Dictionary* of 1845 says, "People may deposit small sums of money at a bank, which the banker lends. Thus a bank is a means of facilitating the loan of money from the possessor of money to the farmer or manufacturer who has goods but wants ready money. The lending of money is the operation of banking, and a bank is a centre which facilitates this lending; it enables people to lend through a banker and his connection, who could not lend without that."

William Ellis, in his bright little *Outlines of Social Economy*, 1846, intended for school children, says: "The Banker . . . receives and takes care of the money of his customers with the understanding that he is to be prepared to pay on demand whatever they may call for." He asks what inducement the banker has to go to this trouble, and answers that of the money "part is employed at interest by the banker, and the interest thereby earned not only suffices to pay all the expenses of the establishment, but yields in addition a surplus profit sufficient to induce the banker to persevere in his business."

Mrs. Fawcett, in *Political Economy for Beginners*, 1870, and Jevons, in his Primer, *Political Economy*, 1878, say just the same.

The conception was a perfectly simple one, and I think it was and remains a perfectly true one. There is nothing really mysterious about the nature of banking "deposits." The term "deposit" seems very appropriate as the name of the verb which we use to describe the action of placing an article with some person or institution for safe custody. We "put things down" anywhere—our spectacle-case and our gloves, and often fail to find them again, and to "deposit" a thing is etymologically nothing more than to put it down; but the latinity of the word seems to give it a tinge of

solemnity suggestive of the rites we go through when we entrust our bag to the cloakroom clerk instead of " putting it down " on the platform.

With one exception we deposit things for safe custody with some person or institution in the full expectation of receiving again, when we come to claim it, the identical article which we deposited. We deposit our bag in the railway cloakroom on the distinct understanding that this bag and not merely an equally good bag will be restored to us when we demand it. True, if the railway company loses the bag owing to the inadvertence or dishonesty of its servant, it will tender compensation, and, the bag being irrecoverable, we shall have to accept fair compensation ; but compensation implies that the contract has been broken : the contract was to restore the same bag and nothing else.

Moreover, with the same single exception, the things when deposited may not be used by the person to whose custody they are entrusted. We should be seriously annoyed if we found the cloakroom attendant using our umbrella to keep himself dry in a shower of rain, and it would be wholly irregular for the wife of the chairman of a safe-deposit company to appear at a ball decked with the jewellery deposited by the Duchess of Blank. If the thing is to be used by the person to whom it is temporarily entrusted, it is not said to be deposited and to be " a deposit " : it is said to be " lent."

The one exception to both rules is money. Money is more homogeneous than bags and their contents. The substitution of one half-crown for another will not affect us in the same way as the substitution of even our dearest friend's toothbrush for our own. Consequently, if we have deposited a half-crown, we are content to receive back another half-crown, or even " half-a-crown " in the different shape of two shillings and a sixpenny piece. No one, except some very small child, expects to receive the identical money which he deposited. Consequently persons and institutions receiving money on deposit have almost invariably mixed up the amounts received from various depositors. Deposit your hat in the hotel cloakroom and the attendant will not expect you to be content to receive back the first hat he can lay hold of ; but deposit your money in the hotel office and you will only expect to get back " the sum " for which you hold a receipt, and it will probably be paid to you in cash deposited by other depositors, or even in cash received in payment of guests' accounts. The homogeneity of money has always stood in the way of any objection being raised by the depositors of money to their deposits being used by the persons to whom they are entrusted. If you happen to meet the hotel ostler riding the bicycle which you deposited with him, you recognize it and complain ; but if in a shop you are given in change a ten-shilling note which you deposited in the hotel office a few hours before, you probably do not recognize it, and if you do you will not dream of going to the hotel-keeper and asking him why he presumed to spend your ten shillings :

he did not undertake to keep *that* ten shillings for you, and he has another ten shilling note ready for you.

This explains why the depositor of money, unlike all other depositors, requires to pay nothing for the accommodation which he gets, but on the contrary nearly always receives something either in incidental services or in interest over and above the advantage of having his money kept safely for him. You will pay ninepence for depositing two bags and a rug for a day or two, but you can deposit a million pounds for a good deal less than nothing.

There is nothing in this one difference between money and other goods to suggest that the person with whom money is deposited can lend out more than he possesses in his own right *plus* what is deposited with him. The most abandoned cloakroom attendant cannot lend out more umbrellas or bicycles than have been entrusted to him, and the most reckless banker cannot lend out more money than he has of his own *plus* what he has of other people's. This is true even of a note-issuing banker : such a banker will no doubt lend his promises to pay on demand so long as there are people who will take them in exchange for goods and refrain from presenting them for payment ; but these people are in reality making him a loan without interest. The extent to which he can borrow in this way limits the extent of his lending.

If it were not true that a banker's power to lend is limited by what he owns and can borrow, we should have the extraordinary result that a small bank with small deposits could lend as much as a big one with many millions of deposits. Yet banks seem to regard it as of considerable importance to acquire depositors!

The nineteenth century writers, taking it for granted that no one would suppose that a banker could lend more than he had got of his own and other people's, were in the habit of saying rather loosely that he could lend some proportion, such as two-thirds or three-quarters of what he had obtained from depositors. But away back about 1730 Cantillon (in a passage cribbed like much else of his, by Postlethwayt's *Dictionary* before his *Essai* was published) had explained quite clearly that the banker had to forecast incomings in the shape of deposits and repayments of advances and set them against his forecast of outgoings in the shape of withdrawals of deposits and advances which he would not like to refuse, and that different bankers dealt with different classes, so that what was sufficient for one might be wholly insufficient for another—one might require to keep in hand about a tenth of his deposits and another would not be safe with less than a half or two-thirds. And anyone can see that the proportion would vary from time to time with the same banker as well as between banker and banker at the same time. If only a banker could arrange to make his incomings exactly correspond with his outgoings, he would obviously have no reason for keeping any stock or reserve at all.

It was never supposed by the simple-minded nineteenth century

economists that anyone would make a difficulty about the aggregate of deposits (1) exceeding the aggregate of cash held by the banks, or even (2) exceeding the aggregate of all the cash held by all persons and institutions, including the banks.

1. It was naturally supposed that a single banker could have a million of deposits and lend out, say, £750,000, that two bankers could have two millions and lend out £1,500,000, and the whole number of bankers together could have deposits equal to four times the amount of their cash in hand. No one saw any miracle in the aggregate of deposits being, say, a thousand millions when the cash held was only £250,000,000 ; this was looked on simply as another way of saying that the banks had lent out three-quarters of the money lent to (*alias* deposited with) them. No one supposed that they had " created " the £750,000,000. If cloakroom attendants managed to lend out exactly three-quarters of the bags entrusted to them, we should not be surprised to find that the number of bags on deposit was exactly four times the number in the cloakrooms : we certainly should not accuse the cloakroom attendants of having " created " the number of bags indicated by the excess of bags on deposit over bags in the cloakrooms.

2. Nor used any difficulty to be made if the aggregate of bank deposits was seen to exceed even the total of cash in existence. It is true that bags not being " currency," a means of payment or medium of exchange which passes easily from hand to hand, bags could only be lent on hire to borrowers who wish to use them personally, so that the number of bags on deposit would be less than the total in existence. But when the bags or other things deposited are currency, the situation is different. Borrowers in this case do not borrow with the intention of retaining the article borrowed till repayment, but with the intention, which they carry out immediately (simultaneously very often) of parting with it in exchange for other things. Consequently, though they owe the sum of money lent them, they do not hold currency to that amount. If you have borrowed a bag and not yet returned it to its owner, you probably have it still : if you have borrowed a thousand pounds it is most unlikely that so much will be found on your person or in your drawer at home. Thus the amount of the currency does not limit the amount of money which can be lent whether by the banks to customers (borrowers) or to the banks by customers (depositors). If the total of bank deposits is three times as great as the total of coin and notes in existence we need no more suppose that the banks have " created money " to the extent of double the coin and notes than we need suppose that because the National Debt is ten times the amount of all the coin and notes, the State has " created money " to the extent of nine times the coin and notes. No ordinary lender supposes he creates money by lending it ; why should the banks ? Just as the amount of the State debt or the total of all individuals' debts is only the sum of what the State or the individuals owe, so

the total of bank deposits is simply the sum of what the banks owe. In no case is there any reason for boggling over the fact that the totals greatly exceed the currency in existence.

All this is much too simple for the present age. Instead of the old doctrine that capacity to lend is based on the possession of valuable property, and that banks accordingly can lend out of their own capital *plus* what solvent customers lend to them (*alias* deposit with them), we have journalists and popular writers and chairmen of large joint-stock banks persuading the public that banks have themselves created, or to use Mr. Hartley Withers' own word, "manufactured," thousands of millions of pounds by lending something which did not before exist to borrowers, who proceed to pay it to other people, who in their turn deposit it in the banks, and who could not have so deposited it unless the banks had lent.

This curious inversion seems to be partly due to the practice of considering how large a proportion of his deposits a banker can safely lend in the form of a question what ratio his advances should bear to his cash. No doubt when you have a million of deposits to deal with, it comes to much the same thing whether you ask what ratio your cash should bear to your liabilities, or what ratio your advances should bear to your cash. But to compare the cash held by the banker with the amount lent by him without any reference to his aggregate command of money is very apt to be misleading. When, for instance, Mr. Withers remarks (*Meaning of Money*, 1918 issue, p. 35), "A banker who has £10,000 in gold or notes at his command would be running too great a banking risk if he advanced ten millions to the most unexceptionable customers," he may have meant that a banker who had £10,010,000 at his command would be very foolish to lend out as much as ten millions and keep only ten thousand in cash. But it is likely that someone among his readers will rub his eyes and say, "Wonderful thing it is to be a banker! Now I have got £10 in my pocket, and yet nobody warns me not to lend £1,000 on the strength of it. Prudence be blowed! my trouble is that I cannot lend a penny beyond my £10 because I haven't got it. Anyone who borrows from me will want to take the money, but these banker fellows seem able to find borrowers who don't. Withers says on the next page that the banker who lent the ten millions to the unexceptionable customers 'would give them the right to take out ten millions in gold and notes, and if even a thousandth part of the right were exercised, the banker's gold and notes would be all gone.' Somehow or other the money lent by the banker seems to stay in his possession, so that he can 'lend' *ad lib.* provided he isn't asked to lend in gold or notes."

The error of this inference clearly arises from leaving out of sight the fundamental fact that the banker is able to lend X, Y and Z more than his own capital because A, B and C are allowing him the temporary use of some of theirs on condition that he will let them have what they want of it when they ask for it. The "customers"

of a bank include both lenders to the bank and borrowers from it, and though some of them are borrowers to-day and lenders to-morrow, there are at any single moment two distinct classes, between which the banker is the intermediary who arranges for the capital of the lenders being used by the borrowers.

I do not think Mr. Withers anywhere denies that where there are a number of banks the power of each bank to lend is limited by the extent of its "resources"—its power, that is, to command money—nor that he anywhere asserts that it can directly increase its resources by lending. If it could, every little bank would soon be a big one ; but he does seem to hold that all the banks in a particular country (what is a country ?) taken together, and any real or supposititious single isolated bank increase their power of lending by lending. The real inspiring text for this doctrine seems to have been the saying among bankers, "Loans make deposits." Indirectly, no doubt, it is true that the lending of money by bankers tends to make deposits, because it is a useful service to the community. Road-making, and any other useful service may similarly be said to tend to make deposits. This seems to be all that the phrase "loans make deposits" originally meant. A nineteenth century banker, W. Haig Miller, remarks: "Bankers increase their deposits by lending money to individuals, who by their loans become wealthy and increase the resources of the district." (*On the Bank's Threshold*, 1890, p. 69.) But latterly the proposition, sometimes hardened into "every loan makes a deposit" (*Meaning of Money*, p. 63), has been taken to mean a good deal more than this.

In Mr. Withers' chapter V, on "The Manufacture of Money," the reader is asked to consider himself a "prudent person" who has borrowed £1,050 from his bank to pay for a new motor-car, and is assured that his "borrowing of £1,050 has increased the sum of banking deposits as a whole, by that amount."

If the borrower's £1,050 was lent him by his bank simultaneously with the repayment to the bank of £1,050 by some other borrower, the proposition would be indefensible on the face of it : if it were true that replacing one borrower by another increased deposits, the total would long ago have reached astronomical figures. Mr. Withers must mean us to suppose that the £1,050 was an *addition* to the loans already made by the bank. The theory thus is that every addition to the total of loans by banks makes an equal addition to the total of their deposits : and if there is only one bank, every addition to the total of its loans makes an equal addition to its deposits, for Mr. Withers later in the chapter introduces the supposition of an isolated district with a single bank which has, according to him, increased its deposits from £100,000 to £1,500,000 by lending £1,000,000 and investing (which is treated as a sort of lending) £400,000. The only other items in the balance sheet are capital £100,000, and cash in hand £200,000.

Of course, a balance sheet, as an expert in currency has observed,

must balance; we must expect to find assets and liabilities growing up together at the same pace. The only question is, "Did the amounts on each side rise, as the nineteenth and previous centuries believed, because monied persons had the power and the will to lend to (or 'deposit with') the bank, as time went on, more and more money, or, as Mr. Withers teaches, because, as time went on, the bank chose to lend more and more?"

The only reason Mr. Withers gives for throwing over the old view that it is the action of the depositors in depositing which enables the bank to lend, and adopting the new view that it is the action of the bank in lending which enables the depositors to deposit, is that the isolated locality "could not have deposited £1,500,000 without advances from the bank, because there never was such a sum in the place." Presumably "there never was such a sum in the place" means "there never was £1,500,000 in coin (or possibly Bradburys) in existence in the place at one and the same moment." But what difficulty does this fact present? No one supposes that the depositors paid in £1,500,000 at one and the same moment. Their £1,500,000 was got together by small surpluses of amounts paid in over amounts withdrawn, spread over a long period. If they paid in an aggregate of 1,326 sovereigns per business day and withdrew only 1,000, they would accumulate £1,500,000 to their credit in fifteen years, and the bank by keeping twenty-two of the sovereigns per day would add £100,000 to its cash, and by paying out the other 304 to borrowers would add £1,400,000 to its advances in the same period. The depositors have deposited £1,500,000 more than they have withdrawn, and it is difficult to make any sense at all of Mr. Withers' proposition that they have "presumably deposited £100,000, since the bank holds £200,000 in cash, of which £100,000 may be taken as having been contributed by the subscribers of its capital." The depositors have a well-founded belief that the whole of the deposits have been deposited by them: are not they the depositors? but Mr. Withers tells them gently but firmly that they are quite mistaken; they have only deposited one-fifteenth and "the rest of the deposits have been provided by the bank itself." "The broad conclusion," he says a few pages further on (p. 72), "is that banking deposits come into being to a small extent by cash paid into banks across the counter, to a larger, but still comparatively small extent, by purchases of securities by the banks which create book credits, and chiefly by means of loans from the banks which also create book credits."

It seems incredible that anyone should imagine that depositors cannot have paid in the past on balance more cash into their bank or banks than the amount of cash which the bank or banks possess at the present moment, but Mr. Withers does not stand alone. Mr. McKenna, in his speech to the London Joint City and Midland Bank shareholders in January, 1920, which was widely applauded, took just the same line. "In June, 1914," he said, "the banks held £75,000,000 of currency. Last month

this figure stood at £191,000,000. The banks, therefore, held more currency to the amount of £116,000,000, and to this extent the increase in the aggregate of bank deposits is accounted for by payments in of currency."

The rest of the increase in the deposits, amounting to about £1,114,000,000, he attributed to "bank loans." We might have expected that the example of the Savings Bank would be sufficient to warn Mr. McKenna off the strange assumption that the amount of cash held by banks shows how much of their total deposits is accounted for by payments in of currency. It could scarcely be contended that any but a small proportion of the nineteenth century Savings Bank deposits was not "accounted for by payments in of currency," but on December 31st, 1899, the Post Office Savings Bank deposits amounted to £130,000,000, while the cash held against them was too trifling a sum to appear as a separate item in the Post Office accounts. In the previous nine years the total of deposits had risen by £62,500,000, of which £20,500,000 was accounted for by interest credited to the accounts by the Bank, and the remaining £42,000,000 was "accounted for" by the fact that the payments in by depositors, which must have been nearly all in currency handed across the counter, amounted to £280,000,000, while the withdrawals were only £238,000,000. Will anyone say that either the sixty millions or the forty millions were "created by the Savings Bank," or that they were "provided by the Bank itself," or that they should be "attributed to bank loans?"

It would seem well to return to the nineteenth century doctrine that banks receive money from one set of people and lend it to another: that the total of this money at any moment is a total of the same nature as the total of the money lent on mortgage of property: that it is just as wrong to regard it as a kind of fictitious cash "created by banks" as it would be to regard the money out on mortgage as a kind of fictitious cash created by solicitors, and little, if any, less wrong than to regard it as a mass of gold. We should also revive the doctrine that deposits tend to increase when people become more numerous and richer, and that given a certain population and material welfare, they tend to vary with variations in opinion about the comparative desirability of direct individual investment and indirect investment through the medium of banks (in more familiar language, opinion about the comparative advantage of "putting your money in the bank" and "putting it in business or stocks and shares"). Recent experience suggests one addition which the nineteenth century never required to think of. This is that the total of deposits tends to increase with a diminution in the purchasing power of the unit of currency in which they are reckoned (and of course *vice versa* it tends to diminish with a rise in the purchasing power of the unit). If the pound sterling will buy less, people of the same wealth and people dealing in the same amount of goods as before will require, and be able to have, a larger number

of pounds at their banks than before. Hence the enormous rise of deposits in this country since the beginning of the War, and the much greater rise in countries in which the unit of account is still more depreciated.

The Economics of Employment in England, 1660-1713

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Meaning is the foundation of system in History.—Lord Haldane's *Meaning of Truth in History*, p. 24 (Creighton Lecture, 1914).

I.

No period in English economic history has suffered more from the tendency of subjecting facts to a pre-conceived notion than has the Restoration period. Regarded by some as the period of neo-mercantilism, more recently by others as the period of incipient capitalism, the interrelation of ideas has not been analysed as an end in itself, before the final judgment has been passed. This process is the more to be deprecated inasmuch as both of the categories of thought under which the web of fact and argument has been subsumed are vague and capable of more than one construction.

The following paper is an attempt at a positive analysis of the system of thought of the half-century which lies between the Restoration of Charles II and the Treaty of Utrecht, as regards labour and labour problems. Only then will it be possible to attempt evaluation from an ideal standpoint.

II.

The basis of thought during the period was the desirability of a large population. It is a mistake to suppose, says Petty, "that the Greatness and Glory of a Prince lyeth rather in the extent of his Territory, than in the number and industry of his people, well united and governed."[1] "Fewness of People," he says elsewhere in the same work,[2] "is real poverty; and a Nation wherein are eight millions of people is more than twice as rich as the same scope of land wherein are but four; for the same Governors which are the great charge may serve near as well, for the greater as the lesser number." So Defoe, "I cannot but note how . . . the Glory, the Strength, the Riches, the Trade and all that's valuable in a Nation as to its figure in the world depends upon the number of

[1] Petty, *Treatise of Taxes*. Hull's Edition of Petty, Vol. I, p. 22.
[2] *Ibid.*, p. 34.

its People, be they never so mean or poor."[1] People, argues Davenant, are "the most important strength of any Nation."[2] Coke re-echoes Petty when he says that "It is not the greatness of the extent of a country which makes it formidable, but the number and well governing of the People."[3] This insistence on a large population was based on the conviction that a large population meant a large trade, that a small population implied a small trade. A large population consumed more than a small one, a small population produced less than a large one would. The assumption is, of course, a static one, it implies a limited rate of production and consumption *per capita*. But it was as wealth producers and consumers that people were demanded. It was in this twofold aspect that foreigners were to be welcomed. "Unless foreigners come in amongst us, in few years there will not be people to manure our lands, eat our provisions, wear our manufactures or manufacture the staple commodities that are of the growth of the Kingdom."[4] Here the twofold idea is very well put. The consumption idea is again prominent in Brewster.[5] "The increase of hands in labour improves and increases manufactory, even of the very expence of them that are added: one man that works may have five or six that only eats and wears." So again Coke,[6] "Multitude and concourse of People advance trade, scarcity of people diminish trade." . . . "As the strength and grandeur of every country is founded in the number of the inhabitants, so is the riches and trade of it, for every man's necessities are supplied by trade, so that . . . in the whole, trade is increased . . . as men live more or less on Society and Conversation; and therefore, wherever people are thin or few, they are poor, lazy, rude and of little use to the publick."[7]

The logical conclusion of this line of thought was obviously that, whatever the moral quality of demand, the volume of production depended upon it. "The main spur to Trade, or rather to industry and ingenuity, is the exorbitant appetite of men, which they will take pains to gratify and so be disposed to work, when nothing else will incline them to it; for did men content themselves with the bare necessarie, we should have a poor world, . . . now in their pursuit of those appetites, other men less exorbitant are benefited. . . . Countries which have sumptuary Laws are generally poor; for when men by those Laws are confined to narrower expence than otherwise they would be, they are at the same time discouraged from the industry and ingenuity which they would have imployed

[1] Defoe, *Giving Alms no Charity*, 1704, in Genuine Works, Vol. II, p. 428.
[2] Davenant, *Discourses on the Public Revenues and on the Trade of England*, Dis. III, Vol. II, p. 2. Edition of 1771.
[3] Roger Coke, *Reflections upon the East India and Royal African Companies*, 1695. 1029, e. 106.
[4] *The Grand Concern of England explained in several proposals offered to the Consideration of Parliament*, 1673. Harl. Miscell., Vol. VIII, p. 555.
[5] *Essays on Trade and Navigation*, 1695, p. 8. (For Brewster, see *D.N.B.*)
[6] Coke, *Discourse of Trade*. Pt. I: Reasons of the decay of the English Trade, 1029, e. 10.
[7] Coke, *Reflections*, etc., p. 15.

in obtaining wherewithal to support them in the full latitude of expence they desire."[1]

Defoe puts the matter even more clearly in *The Compleat English Tradesman.*[2] "Trade is propagated by our crimes, the people support one another by their extravagance and luxury, their Gaiety and Pride: gluttony and drunkenness assist to maintain the Nation, the people grow rich by the people, they support one another; the Taylor, the Draper, the Mercer, the Coach-maker, etc., and their servants, all haunt the public houses; the masters to the taverns, the servants to the ale-houses, and thus the vintner and the victualler thrive and grow rich. Those again getting before hand in the world must have fine clothes, fine houses and fine furniture; their lives grow gay, as the Husbands grow rich and they go on to the Draper, the Mercer, the Taylor, the Upholsterer, etc., to buy fine clothes and nice goods; Thus the Draper and Mercer and Taylor grow rich too, money begets money, trade circulates and the tide of money flows in with it, one hand washes the other hand, and both hands wash the face."[3] Even by the Balance of Trade fanatics the consumption of "fripperies" is condoned if the labour that goes to make them is English labour.[4] The tendency to regard all consumption as productive should have been strengthened by the assumption that the total wealth of the community was neither increased nor diminished by payments from one subject to another in the realm—an assumption derived partly, at any rate, from the current theory of the Balance of Trade, for, runs Davenant's argument, "by what is consumed at home, one loseth only what another gets and the nation in general is not all the richer."[5] It ought to have been seen that neither was it poorer, but unfortunately the assumption that by foreign trade the wealth of the nation was actually increased in a way the home trade was unable to bring about led to a distinction being drawn between trade and labour useful for producing articles for foreign trade, and trade only serving

[1] Dudley North, *Discourse upon Trade*, 1691. *Johns Hopkins Reprints*, p. 27. Davenant, though holding that "thrift does proportionately enrich a whole people, as it betters the condition of a private man," still gives a qualified assent; "perhaps it is not impossible but that our industry would be less active if it were not awakened and incited by some irregular appetites which are more easily found fault with than avowed."—*Discourse*, Vol. I, p. 390.

[2] So far as I am aware no English writer has noticed the bearing of this passage on Mandeville's *Fable of the Bees.* Professor Sombart has used the passage in his *Der Bourgeois* (1913).

[3] p. 118, cf.: "It may indeed be true that the Increase of Crime is the increase of Commerce and the wickedness of the time is the blessing of the Trade, the Vanity, the luxury, the folly, and even the vice of the People is the cause of that increase . . ." (p. 147).

[4] Samuel Fortrey, *England's Interest and Improvement*, 1663: "That the excess of this expence consist chiefly in the art, manufacture and workmanship of the commodity made in our own country; whereby ingenuity would be encouraged, the people employed and our treasure kept at home, so as the Prince would be nothing damnified by the excess for the ruine of one would raise as much on other of his subjects." *Johns Hopkins Reprints*, p. 27. See also Cunningham, *Growth*, etc., *Modern Times*, p. 392. Dr. Cunningham seems to me to be mistaken in assuming the truth of J. S. Mill's dictum, "demand for goods is not demand for labour."

[5] *An Essay on the East India Trade*, Works, Vol. I, p. 103.

to satisfy the " unproductive " home consumption.[1] At the same time the benefit of a large consumption at home still remained in the background of consciousness; this being justified on the line of argument that if there was to be consumption at home, home production was preferable to the importation of foreign goods, on which the nation lost positively.

Nevertheless, the resulting confusion as to what was, or was not, beneficial consumption did not interfere with the desirability of population as a factor of production. It tended, however, to make the phrase " increase of population " synonymous with " increase of workers in those industries which are desirable." So in the assertion " There is nothing so much wanting in England as people : and of all sorts of people, the industrious and laborious sort, and handicraftsmen are wanted to till and improve our land and help to manufacture the staple commodities of the Kingdom : which would add greatly to the riches thereof."[2] Population was looked upon mainly as a factor of production, only incidentally as a factor in consumption, owing to a theory of foreign trade which threw suspicion upon home consumption.

Now a working population could be drawn either from foreign countries or from the inhabitants of this country, and both possibilities led to a mass of proposals. The first possibility led to the inclusion among the proposals of the economists of the day, of the naturalization of foreigners.[3] The second possibility led to a double examination of tendencies, (1) as to the tendency of plantations unduly to depopulate the Mother Country, (2) as to the tendency of the current methods of relieving the poor to withdraw men from the Labour Market.

1. Opinion was decidedly divided on the advisability of allowing emigration to the plantations. Coke argued roundly that " the Trade of England and the Fishing Trade are so much diminished,

[1] Fortrey : " Our case should therefore be to increase chiefly those things which are of least charge at home, and greatest value abroad," *loc. cit.*, p. 19. Davenant : " It is the interest of all trading nations whatsoever that their home consumption should be little, of a cheap and foreign growth and their own manufactures should be sold at the highest market and sold abroad ; *since by what is consumed at home, one loseth only what another gets, and the nation in general is not at all the richer*, but all foreign consumption is a clear and certain profit. So that in the woollen manufacture England does not get by what is spent here by the people, but by what is sold abroad in other countries," thus leading him to justify the importation of East India goods, *op. cit.*, I, 103: cf. also Child, *A New Discourse of Trade*: " I do agree fully . . . that luxury and prodigality are as well prejudicial to Kingdoms as to Private Families, and that the expence of Foreign commodities especially foreign manufactures is the worst expence a nation can be inclined to, and ought to be prevented as much as possible." (Preface.) " We are not half so much given to Hospitality and good Housekeeping as in former days, when our greatest expence was upon our Bellies, the most destructive Consumption that can happen to a nation," *ibid.* 57. Also Brewster, *op. cit.*, ". . . there is a receiv'd opinion to be removed and that is, that expence of the Labour and Products of a Country is the support of the Artizans and brings Riches to men of Real Estates " (p. 50).

[2] *Grand Concern*, p. 555.

[3] Child, *Discourse* (141-5) argues for the naturalization of Jews in a manner which shows the suspicion of them entertained by the merchants of the day. Roger Coke was in advance of the majority of the writers of the day in desiring the immigration of Roman Catholic artificers.

by how much they might have been supplied by those men who are diverted in our American plantations." [1] Child argues that although a loss of population is in general undesirable, yet that the settlers of our North American plantations, being largely malcontents with the state of affairs in England, would have been lost in any case, whilst they serve a useful purpose in the Plantations by employing English shipping and taking English goods. [2] Davenant [3] argues on the same lines, suggesting at the same time that England should be made a "General Asylum" and—then "our own malcontents may retire without any prejudice: for the recruits of people such a course might produce, would answer the annual evacuation occasioned by our West India Colonies." [4]

2. The unanimous opinion of the writers of the time was that the poor-law of Elizabeth tended to reduce the available supply of labour, a result also produced by indiscriminate charity. The writer of the *Grand Concern* argues that the cost of the poor is £70,000 a month and this is "employed only to maintain idle Persons: doth great hurt rather than good: makes a world of poor, more than otherwise would be, prevents industry and laboriousness: men and women growing so idle and proud, that they will not work, but lie upon the parish wherein they dwell for maintenance." [5] The Poor Law is "a thing most piously designed: yet proving an encouragement to thievery and idleness, a charge to the industrious inhabitants of every Parish and an injury to the whole Nation." [6] So Brewster, "There is no Nation I ever heard of, who by a Compulsory Law, raiseth so much money for the Poor as England doth . . . our Charity is become a Nuisance, and may be thought the greatest mistake of that Blessed Reign, in which that Law passed, which is the idle and impoverished man's Charter: for if Shame or Fear of Punishment makes him Eafn his Dayly Bread he will do no more, his Children are the Charge of the Parish and his Old Age his Recess from Labour or Care: he makes no Provision for it in the time of his Youth and Strength, because he hath better Security for his Maintenance than money of his own laying up." [7] So also Cary, Davenant and others. [8]

[1] *Discourse of Trade*, Pt. I, p. 7.

[2] *Discourse*, ch. x, Concerning Plantations: The first settlers of Virginia and Barbadoes were such as "could probably never have lived at home to do service for their Country but must have come to be hanged or starved or aged untimely by some of those miserable Diseases that proceed from want or vice, or else have sold themselves for soldiers . . . in the Quarrels of our Neighbours" (184).

[3] *Works*, Vol. II, on the Plantation Trade, p. 5. [4] *Ibid.*, p. 6.

[5] He goes on: "But, if . . . the money collected were employed to set all of them that are able to work to some kind of employment or other, suitable to their capacities . . . it would be of infinite use and advantage to the Nation."

[6] *Reasons for a Limited Exportation of Wool*, p. 12. [7] *Loc. cit.*, p. 59.

[8] Cary, p. 157: "But above all our Laws to put the Poor at work are short and defective, tending rather to maintain them so, than to raise them to a better way of living." "The Laws render the Poor more bold, when they know the Parish Officers are bound either to provide them work or give them maintenance." Davenant, cf. *Essay on E.I. Trade*, Vol. I, p. 100. Also *The Trade of England Revived*, 1681: "The poor addict themselves to idleness and pilfering because they know that if they come to want the Parish is bound to keep them."

Insistence on this point marks the breakdown of the view that a large population is desirable because of its possible consuming power. Defoe's eulogy of the People "be they never so mean or poor," evidently is not to be taken in its literal sense, but refers to the productive power capable of being exerted by a large working population. Brewster's artificer is to be relieved "of the five or six that only eats and wears" in order that the supply of labour may be *pro tanto* increased.

III.

The view that the nation only "gained" by production for a foreign market (and the qualified assent given to production for home use) supplied the reason for insisting on a large working population. For to achieve success in trade it was necessary to produce cheaper than one's rivals, and the larger the supply of labour, the lower were the wages that need be paid. Hence a large population was not merely desirable as furnishing the requisite labour power, but it also enabled that power to be obtained on cheaper terms. The lower the wage the more trade would be stimulated. The admission of aliens and the reform of the poor-law could both be directed to this end. The logical consequence of this was that if all labour could thus be employed in industry, there would be no need for a poor-law at all. The desirability of dispensing with the poor-law thus led to a further argument that all impediments to the employment of as much labour as possible should be avoided.

It would seem that the theory of wages thus set up was the "Supply and Demand" one. This, however, ran counter to another theory of wages current at the time, i.e., that wages depended on the cost of food.[1] The discussion of the commercial clauses of the treaty of 1713 especially is full of reference to this conception. "Wages in France were never above two-thirds of those that were always given for the like labour in England. This in all probability is owing to the meaner way of living in that Country. Labouring People seldom have any other Ambition than to live and save nothing. Therefore if the yearly Subsistence of such Persons in France is purchased by two-thirds of the Price that is given for the Subsistence of like Persons in England, this will very well account for their receiving no more than the two-thirds of the English wages. And from hence it appears that the French refugees, when they came first to settle here, perpetually undersold the English, till they raised themselves by degrees to our Country Diet."[2] Thus also Davenant:[3] "The additional duties on beer and ale and the tax upon malt are apparently a burthen upon the woollen manufactures, affecting the carder,

[1] The origin of this theory seems to be due (1) to the comparison between the desirable and the actual, (2) to the Elizabethan Labour Code raising or lowering wages according to the plenty or scarcity of the times.

[2] *The Consequences of a Law for Reducing the Dutys upon French Wines*, etc., 1713, p. 6, 1029 e. 9/5; also *General Maxims in Trade, Particularly applied to the Commerce between Great Britain and France*, 1029 e. 9/6, p. 10.

[3] *An Essay upon the Probable Methods of making a People Gainers in the Balance of Trade*, 1699, Works, Vol. II, p. 267.

spinner, weaver and the dyer, who all of them must be raised in their wages, when the necessaries of life are raised to them. The consequence of which must be that our woollen goods must come at a heavy and disadvantageous price into the foreign markets." The Irish Cattle Acts were constantly attacked on the grounds that by lowering the cost of provisions in Ireland, they allowed the Irish woollen industry to compete successfully with the English.[1]

It was possible to reconcile these two positions in several ways:

1. It was possible to deny the fact that wages moved as the price of food moved. Thus Petty[2] argued that "It is observed by Clothiers and others, who employ Great numbers of people, that when Corn is extremely plentiful that the Labour of the poor is proportionately dear: And scarce to be had at all (So licentious are they who labour only to eat or rather to drink)." So also Child: "And for our own Poor in *England* it is observed, That they live better in the dearest Counties for provisions, than in the cheapest, and better in a dear year than in a cheap . . . for that in a cheap year they will not work above two days in a week: their humour being such, that they will not provide for a hard time, but just work so much and no more, as may maintain them in that mean condition to which they have been accustomed."[3]

2. It was also possible to argue that as the price of commodities was increased by a rise in wages, so lower wages meant lower food prices and therefore wages in industry could be lowered. This was Defoe's argument. "If wages grow high, Provisions rise in Proportion, and I conceive it to be a mistake in those People . . . who say Labour is cheap . . . because Provisions are cheap, but 'tis plain Provisions are cheap because Labour is cheap."[4] He therefore drew the conclusion that wages, though they affect the price of commodities, were themselves determined purely by supply and demand: wages rise and fall like the Exchange.

3. It was lastly possible to argue that though in the last resort wages moved with the cost of food, yet that in practice the standard of comfort was so high that actual wages were in excess of that minimum subsistence level, or at any rate that they should be no higher. Petty[5] argues that it is impossible to "raise" the value of

[1] *Grand Concern*, 558. *Reasons for a Limited Export of Wool*, p. 14. *The Proverb Crossed or a New Paradox Maintained, That it is not at all times true, that Interest cannot lye*, 1677. Both Tracts in Collection of Tracts on Wool, 712, g. 16.

[2] *Political Arithmetic*, Hull's Edition, Vol. I, p. 274.

[3] Child, *loc. cit.*, pp. 15, 16. Coke expressly argues against the Poor Law: "It is a discouragement to all industrious and labouring people, when lazy and idle people shall be maintained in their idleness from the fruits of their labour and industry. It encourages wilful and evil-disposed persons to impose what wages they please upon their labours: and herein they are so refractory to Reason and the Benefit of the Nation that when Corn and Provisions are cheap they will not work for less wages than when they were dear.

[4] "The Employers are the Remitters, the Workmen are the Drawers; if there are more Employers than Workmen, the price of wages must rise, because the Poor man wants to do it; if there are more Workmen than Employers, the price of Labour falls, because the Poor man wants his Wages more than the Employer wants to have his Business done," *loc. cit.*

[5] Petty, *Treatise of Taxes*, p. 87, Hull's Edition, Vol. I.

money and forbid wages from rising at the same time, for then " would this Act be onely as a Tax upon the said Labourers, as forcing them to lose a half their Wages which would not onely be injurious but impossible unless they could live with the said half (which is not to be supposed) for then the Law that appoints such wages were ill-made, *which should allow the Labourer but just* wherewithal to live ; for if you allow double, then he works but half so much as he could have done and otherwise would which is a loss to the Publick of the fruit of so much Labour." However, whether the theories were reconciled or not, there is no doubt about the practical anxiety displayed as to the necessity of low wages.

First, as to the influence of foreigners. Child argues that high wages are due to Incorporation " whereof the cure is mainly by an Act of Naturalization and without Compulsory Laws." [1] Brewster, arguing for the admission of foreigners, declares that " it is undeniable that if the Increase of Hands abates the Price of Manufactorys, it will inlarge their Exports and Expence at home." [2] So as regards the effect of charity : the cost of production in England is not high " because Provision is dearer in England than it is in other Countreys," but because " Begging is suffered so Rife in this Kingdom. Now if this Begging Trade be not suppressed, there will never be any good done either upon the Clothing Trade or any other." [3] By setting the parish poor to work,[4] they will " help to manufacture the staple commodities of the Kingdom at cheap rates and thereby bring down the wages of handicraftsmen, which now are grown so high, that we have lost the trade of foreign consumption. . . . This mischief of high wages to handicraftsmen is occasioned by reason of the idleness of so vast a number of people in England as these are : so that those that are industrious and will work make men pay what they please for their wages : but set the poor at work and then these men will be forced to lower their rates : whereby we shall quickly come to sell as cheap as foreigners do and consequently ingross the trade to ourselves." Paterson, demanding a Council of Trade for Scotland, fiercely denounces " a third sort of thieves, which is that idle and dissolute people called beggars, for although they be somewhat more tame and familiar with us, yet are they really but another sort of thieves," and demands government control of industries to eradicate the trouble, slavery not being efficacious " as in such a case only the

[1] Child, Preface to *Discourse.*

[2] *Loc. cit.*, p. 9.

[3] *The Trade of England Reviv'd*, 712, g. 16, 1681, p. 10. The tract argues a similar charge against the Poor Law.

[4] *Grand Concern.* The advocates of the Woollen Trade disliked the introduction of other industries on the ground that this tended to raise wages. Thus W. C(arter), in 1700, argues against the introduction of the Linen Trade, since it may " injure that of the woollen by diverting some that are now in it and so raise the price of spinning : than which nothing can be more prejudicial : for . . . nothing can retrieve our lost trade abroad, but underselling our competitors ; so then we must labour to make wares as cheap as we can and not set up another manufactory. To bid who gives most for spinners is a ready way to ruin the Clothing Trade of England." *An Alarum to England, To Prevent its Destruction*, 1029, e. 9/23.

strongest and ablest of them would be taken up by particular men . . . so that the evil might thereby be somewhat lessened and abated but far enough from being rooted out." [1]

This attitude of mind had two distinct and dangerous consequences. Firstly, resentment against the high wages paid to the "independent labourer" and resentment against the good living guaranteed by the poor-law led to the identification of the two aspects of the question and made the problem one of low wages. "To employ the poor" in industry and to employ the poor in a work-house began to be regarded as the same problem, because the latter seemed to be an aid to the former. If the work-house labourer was to work in order to bring down the wages of the "industrious" worker, he incidentally brought down his own remuneration and thus identification seemed plausible. On the other hand, just because of this identification, it seemed plausible to argue that this or that industry ought to be begun at the expense of the parish or the county rates, since this policy would increase the total amount produced, and yet lessen throughout industry the rate of wages.[2]

[1] Saxe-Bannister's Edition of the Writings of William Paterson, 1859. *Proposals and Reasons for Constituting a Council of Trade*, p. 92 (12268, d. 2).

[2] Some few writers do not think high wages disadvantageous. Child, in the Preface to the *New Discourse*, discusses the matter and decides that high wages are not a disadvantage to trade since (1) the Dutch pay higher wages than the English and (2) High Wages are a sign of the Riches of a Country, low wages an indication of poverty. More interesting are the views of Cary and Sir Dudley North. Cary argues (1) "that we must consider that Wages must bear a Rate in all Nations according to the Prices of Provisions . . . and this price must arise from the Rates of Land, it cannot be imagined that the Farmer whose annual Rent is Twenty Shillings per Acre can afford it as low as he who pays but Half-a-Crown, and hath the same Cropp, nor can he then expect labour so cheap as the other. This is the case of England, whose Lands yielding great Rents require good prices for their Product . . . you cannot fall wages unless you fall Product, and if you fall Product you necessarily fall Land" (*op. cit.* 144/5); (2) Experience shows that high wages can be paid and this "proceeds from the Ingenuity of the Manufacturer and the Improvements he makes in his ways of working. . . . Various methods are used all which save the Labour of many Hands so the Wages of those imployed need not be lessened" (146). He adds: "New Projections are every day set on foot to render the making our Manufactures easie, which are made cheap by the Heads of the Manufactures, not by falling the price of Poor People's labour: cheapness creates Expence, and Expence gives fresh Imployments, so the Poor need not stand idle if they could be perswaded to work" (147). He thus arrives at the same conclusion but by a different route.

Sir Dudley North argues that the importation of East India goods will not lower wages, since it may lead to the introduction of improvements which lessen the total cost of manufactures and therefore lower prices while leaving wages as high as they were before. "Arts and Mills and Engines, which save the labour of hands, are ways of doing things with less labour and consequently with labour of less price, though the wages of men employed to do them should not be abated. . . . Such things are successively invented to do a great deal of work with little labour of hands: they are the effects of necessity and emulation. . . . If my Neighbour by doing much with little labour, can sell cheap, I must contrive to sell as cheap as he. So that every Art, Trade, or Engine doing work . . . cheaper begets in others a kind of necessity and emulation either of using the same art, trade or engine, or of inventing something like it . . . that no man may be able to undersell his neighbour. And thus the East India Trade, by procuring things with less and consequently cheaper labour, is a very likely way of forcing men upon the invention of Arts and engines by which other things may be also done with less and cheaper labour and therefore may abate the price of manufacture, though the wage of men should not be abated," p. 67. The same is true of Order and Regularity: "The more variety of artists to every manufacture, the less is left to the skill of single persons, the greater the order and regularity of every work, the same must needs be done in less time, the Labour must be less and consequently the

For all but a few writers this ended the matter. The minority argued that under given circumstances work-house employment tended of itself to accentuate the problem of employment. This conviction arose from the fact that they recognized that it was possible to glut the market and thus sell nothing at a paying price. The most famous exponent of this view is Defoe. Arguing that wages are above subsistence level and therefore that there is no lack of employment, " since any man would work for just as much as would supply himself rather than starve," he argues that to employ the poor in work-houses in manufacturing woollens, is to employ them in a trade already " managed to a full extent " and therefore would mean merely " transfering the manufacture from *Colchester* to *London* and taking the bread out of the mouths of the Poor of Essex, to put it into the mouths of the Poor of Middlesex." [1] That being said, he adds, " If they will employ the Poor in some manufacture which was not made in England before, or not bought with some manufacture made here before, then they offer at something extraordinary." [2] Another writer who considers the matter is T. Firmin, who answers the objection against his scheme, " What will you do with all the yarn these poor people shall spin? If you weave it into cloth, the commodity is brought over so cheap, that you will never be able to sell without much loss," by arguing " That we had much better lose something by the labour of the poor, than lose all by letting them live in sloth and idleness; for suppose you should give sixpence for that work which is really worth but fivepence; here will fivepence really be got to the nation, though one penny should be lost to the parish." [3] The real difficulty lies, not in giving sixpence for a thing worth fivepence, but in only giving a penny for a thing costing sixpence to produce, and this the author does not cope with. However, the intention is plain, philanthropy must temper economic argument. This, of course, made it still easier to advocate the extension of work-houses, and the disciplinary virtues of the work-house blinded the more far-sighted business man, if he was not dazzled by its philanthropic aspects. Thus Cary advocates public or private work-houses, in which " Imployments must be provided . . . for all sorts of People, who must also be

price of labour less, though wages should not be abated."—*Considerations upon the East India Trade*, 1701 (1130, g. 3).

See also Defoe, *Plan of English Commerce*, 3rd edn., p. 60: " This (i.e., reduction of wages), therefore, is beginning at the wrong end of trade; but the true way is, keep up the goodness of your manufacture so as to make it excel in Quality and its exceeding in Price will be no Deficiency in Trade."

[1] *Giving Alms no Charity*, p. 442.

[2] It must be admitted that the passage suggests sarcasm, but to the ordinary man at the time it was written it need not have appeared so, since the current view of the trade with France was just that it was *not* an interchange of goods for goods. The current assumption was that England lost heavily on the trade.

[3] *Some proposals for the employing of the Poor, especially in and about the City of London*, T. Firmin. He advocates homework as well as work-house employment. Cp. William Goffe's *How to advance the Trade of the Nation and to employ the Poor*, in Harl. Miscell., 4, 385. He argues that putting the poor to make goods of the kinds the nation is " overstocked with already " is but " undoing in one place to make another."

compelled to go thither when sent and work-houses to receive them . . . the design is to provide places for those who care not to work any where and to make the officers of Parishes industrious to find out such Vermin, when they shall know where to send them, by which means they would better be able to maintain the impotent."[1]

The result of the main tendency of thought on this subject was a flood of pamphlets advocating the employment of the "poor," in all manner of ways, concern for their well-being proving very often a cloak for some specious project or other.[2] A sanctimonious writer demands the introduction of flax spinning in "Proposals for building in every county, a working Almshouse or Hospital, as the best expedient to perfect the Trade and manufactory of linen cloth."[3] William Goffe[4] demands the encouragement of sail-cloth making and fishing by means of a tax on all parishes for three years according to the "poor tax rate." The use of the parish poor in the woollen manufactory is a favourite device.[5] Petty demands their employment in what would now be called "Public Utilities." "Making all high wayes so broad, firm and even, as whereby the charge and tedium of travelling and carriages may be greatly lessened. The cutting and scouring of Rivers into navigable; the planting of useful trees for timber, delight and fruit in convenient places."[6]

The logical conclusion was that by the application of this method either (1) the poor-law could be dispensed with, since if wages were lowered sufficiently, the sale of products abroad would provide industry with a market and the poor-law simply turned the scale and caused a glut (Defoe) or (2) that the poor-law industries simply became part of the wealth-producing organization of the nation. Both ideas as to employing the poor had the result of causing labour to be regarded simply as a factor of production, standing, as it were, outside "The Nation," an anticipation of the result produced later by the Wages Fund Theory of Wages.

[1] Cary, *loc. cit.*, p. 159.

[2] The author of *An Appeal to the Parliament concerning the Poor, that there may not be a beggar in England*, 1660 (Somers Tracts, 7.520), demands accurate statistics and the settlement of a "poor man's office . . . where handicraftsmen and labourers that want work and such as want workmen may enquire."

[3] Harl. Miscell., 4, p. 489, 1677. This is clearly a projector's pamphlet.

[4] *Loc. cit.*

[5] See above, and *The Proposals for Promoting the woollen manufactory promoted by several well wishers thereunto, Inhabitants and citizens of London*, 1679, 712. g. 16 (18).

[6] *Treatise of Taxes*, Vol. I, p. 29: I assume this to be public employment from the context. John Collins ("Accomptant" to the Royal Fishery Company) also demands the employment of the poor in the reclamation of waste lands. *Salt and Fishery*, 1682, 981, b. 5. Another pamphlet on the fishing trade is James Puckle's *England's Path to Wealth and Honour in a dialogue between an Englishman and a Dutchman*, 2nd edn., 1700, 1029, 2 g. (4). His Fishing Company is to have the power of "Fathers of the Poor" (a plan obviously based on Child's proposals, Somers Tracts, 11, p. 607) controlling church collections, Poor rates, etc. His argument runs "Gold and silver mines England hath none and in time of Peace no way to get Bullion but by foreign traffick, to which nothing can more conduce than cheap fishing and cheap working and manufacturing the commodities which compose the exports of our kingdom and that is not to be effected except Labour be cheap, which it can never be where Provisions are dear. But the cheaper our Provisions are the cheaper our exports may be afforded."

Two further results may be noted:

1. If the amount of non-profitable relief was to be reduced, it seemed obviously desirable to afford as much employment to labour in industry as possible. Hence came an attack on labour-saving devices and the theory that the most beneficial trades were those which employed most labour. Thus Defoe: "All methods to bring our Trade to be managed by fewer hands than it was before, are in themselves pernicious to England in general, as it lessens the employment of the poor, unhinges their hands from the labour and tends to bring our hands to be inferior to our Employ, which as yet it is not. . . . 'Tis the excellence of our English manufacture that it is so planned as to go through as many hands as 'tis possible; he that contrives to have to go through fewer ought at the same time to provide work for the rest."[1]

2. The employment of public funds in industry led to a demand for protection, which the previous assumption strengthened.[2]

The most interesting attack on the "work fund" idea comes from Sir Dudley North. "If to make work for the people," he says, "a Law is made this year to destroy the Trade of the East Indies, some other such law will be wanted the very next. We may well hope, that in time the Navigation of the Thames, of every other river be destroyed, that many may be imployed in the carriage which is now performed by few. By degrees, not an Art or engine to save the labour of hands will be left in England. When we shall be reduced to plain labour, without any manner of art, we shall live at least as well as the wild Indians of America, the Hottentots of Africa, or the Inhabitants of New Holland. As often as I consider these things, I am ready to say with my self, that God has bestowed his blessings upon men that have neither hearts nor skill to use them. For why are we surrounded with the Sea? Surely that our wants at home might be supplied by our Navigation into other countries, the least and easiest labour. By this we taste the spices of Arabia, yet never feel the scorching sun which brings them forth; we shine in silks which our hands have never wrought; we drink of vineyards which we never planted. The Treasures of those mines are ours in which we have never digged, we only plough the deep and reap the Harvest of every Country in the world."[3] "Certainly every individual man in England might be employed to some profit to do some work which cannot be done without him; at least the contrary is not evident, as long as England is not built, beautified and improved to the utmost perfection, as long as any country possesses anything which England wants, Spain the gold and silver of America, Holland the Fishing and other Trades, France the wines, as long as champagne

[1] *Loc. cit.*, 438, cp. Barbon, *Discourse of Trade*: "The advantage to the Nation from Trade is from the Customs and from the goods that Imploys most Hands." An idea probably derived from his interest in building schemes.

[2] Firmin demands the prohibition of goods by Higher Duties, Goffe the prohibition of the export of unwrought goods.

[3] *Considerations upon the East India Trade*, 1701 (1139, g. 3), pp. 58-9.

and burgundy are not drunk in every Parish ; some of these things might be appropriated to England." [1]

At least the erstwhile Turkey merchant cannot be accused of lack of optimism.

IV.

Under which category of thought is the system of economics analysed in the preceding pages to be put ? The question is one of some importance.

The answer depends upon the view taken as to what was the dominant consideration in the minds of the men of the time. The time was one of intense international rivalry,[2] and the economic writings of the time envisage the economic problems of the day as primarily bearing upon the international position of the Nation. " To buy cheap and sell dear " [3] was not the maxim of the orthodox Free-trader, but seemed the obvious policy to pursue in order to oust Holland and to rival France. The phrase was, in other words, applied to the economic activities of the State considered as an entity, and did not primarily apply to the individual merchant at all. Indeed, the current assumption that the State might lose though the individual gained made it obvious that any facile coincidence of private and public advantage was not yet part of the intellectual equipment of the time.[4] It was only when the identification of private with national profit began to be made that any advance could take place.

The theory of employment outlined in the previous pages was justified on the basis of the current theory of international trade, and is thus a mercantile theory in the Smithian sense of the word. The peculiar importance of the international trade views of the day has been, to my mind, unfortunately obscured by the extension of the meaning of the term " Mercantile System " to cover a wide ground—that in which it is co-extensive with State power in an absolutist sense.

Another view has recently been trenchantly stated by Professor Levy.[5] He sees in the labour theory of the Restoration the promptings of the Puritan conscience, transforming itself by contact with economic facts into a half-fledged theory of *laissez-faire*.[6] Genetically regarded, this view cannot lightly be dismissed, yet it appears to be somewhat exaggerated.

[1] *Ibid.*, pp. 54-5.
[2] G. B. Hertz, *English Public Opinion after the Restoration.*
[3] " The art is when we deal with strangers, to sell dear and to buy cheap." Fortrey, *loc. cit.*, p. 29.
[4] A letter to the Honourable A(rthur) M(oore), Commissioner of Trade and Plantation, 1713. 1029, e. 9 (10) : " A merchant may gain a thousand pounds to his country and yet gain nothing, nay, even lose by the adventure himself." " In what any single person shall be a loser, there, endeavours will be made to hinder the publick gain." Fortrey, *ibid.*, 12.
[5] *Economic Liberalism*, 1913.
[6] See specially chapters vi and vii.

1. The influence of Puritan thought seems undoubtedly most marked in the emphasis placed upon the evils of idleness. In so far as the economists of the time urged reformatory methods they were no doubt profoundly influenced by the Puritan theory of morals.[1]

2. The harshness of tone towards the poor attributed to this ground can be exaggerated. Thus William Goffe, a regicide and a Puritan,[2] argues that " the poor ought to be encouraged and mercifully dealt with, and kindly used, until their slow hands be brought to ready working and ought at first to have the highest price the commodity will bear to themselves," the expenses of training to be paid by the parish.[3] So Firmin, who argues for his scheme on the ground that it will ease the minds of " all that have any bowels of compassion " and increase their enjoyment of the good things of this world, as well as making property more secure and confirming the hopes of Christians,[4] and appearing among the elect on the Day of Judgment, pleads for discrimination : " Do not imagine that all the poor people in England are like unto those vagrants you find up and down the streets. No, there are many thousands whose necessities are very great, and yet they do what they can by their honest labour to help themselves ; and many times they would do more than they do but for want of employment.[5]

3. A true theory of *laissez-faire* would have rested content with high wages, provided they were the product of " natural " laws. The evil influence of high wages seems, during the period under review, to be far more the expression of an employing class desiring cheap labour in order to capture foreign markets, an axiom of business not entirely alien to our own day.[6] The enterprising business man of the day was in conflict with the tendency of his employees to remain content with a fixed standard of comfort. Of course, in so far as " progressive " ideas were the result of Puritanism, the two streams of thought fused. But it was the theory of international trade which gave the characteristic turn to the thought of the day. Moreover, to use the work-house as a means of beating down wages was not *laissez-faire*, but the contrary. The *laissez-faire* attitude surely implies an absence of State aid in any form.[7]

[1] See spec. Cary, *loc. cit.* : " Nor is God more honoured than He is among these industrious people, who abhor vice on equal principles of Religion and good Husbandry, Labour being usually a barrier against sin, which doth generally come in at the doors of idleness." p. 166.

[2] *Vide D.N.B.*

[3] *Loc. cit.*

[4] *Loc. cit.*, pp. 9, 11.

[5] *Loc. cit.*, pp. 9, 11.

[6] Cary was not, as we have seen, in favour of low wages.

[7] It is worth noting that the pamphlet, the *Grand Concern of England*, which, *inter alia*, desires the abolition of coffee houses and stage coaches and caravans, is not at all liberally inspired, although it demands lower wages in order to achieve a monopoly of foreign trade! It is characteristic of the difficulty of summing up the thought of the day that Child (who believed in the efficacy of a law to reduce the rate of interest) argued that wages varied " naturally." " Such as our employment is for people, so many will our people be, and if we should imagine we have in England employment

The necessity of ousting England's trade rivals appears, after all, to have carried the day.

but for one hundred People and we have born and bred amongst us one hundred and fifty people, I say the fifty must away from us or starve or be hanged to prevent it. . . . If by reason of the accommodation of living in our foreign plantations we have evacuated more of our people than we should have done, if we had no such plantations, I say . . . that decrease would procure its own remedy, for much want of people would procure greater wages and greater wages, if our laws gave encouragement, would procure us a supply of people without the charge of breeding them, as the Dutch are." *Loc. cit.*, 127.

Asiatic Immigration into Australia

By Persia Campbell, *Research Student.*

The influence of Asiatic immigration on the course of Australian history—as a force both centripetal, strengthening the national sentiment, and centrifugal, weakening the imperial connection—is not generally appreciated. Yet only by an understanding of the historic circumstances of its development can such a national complex as the " White Australia " policy be explained. And whether justifiable or not, these deep-rooted prejudices will have to be reckoned with by any statesman who wills to establish relations between Eastern and Western civilizations on terms acceptable to both. It is a problem the solution of which is already urgent.

To fix the origin of the Federal movement in Australia is historically impossible. Yet it is certain that every attempt made before 1876 to institute a Federal Government was doomed to failure, lacking the vital impetus of a popular will. The Federation of jealous States can be effected only by the pressure of strong public opinion. But a pioneer community is intensely individualistic, and in it such opinion is not moulded by abstract ideas. Motifs for public action arise only when practical self-interests are immediately affected. It was not until the second definitely formative period of Australian history, 1876-1888, that the threatened subversion of their social order by a Chinese influx forced the Australian communities to concerted action, and emphasized the need of a political instrument for the realization of their common will. And also during that period they became more impatient of the limitations on their Sovereign rights imposed by a colonial status, as it was made manifest that their interests and the interests of Great Britain were not necessarily in accord. But British protection and therefore British Sovereignty remained an obvious necessity in their divided weakness. Union is strength, and strength is independence.

Chinese immigration was not a new phenomenon in 1876. During the 'Forties the colonial squattocracy, opposed to the unexpected demands of the English emigrants and dissatisfied with the assigned convict system, had introduced several hundreds of Chinese and Indian coolies as indentured labourers. During the gold discoveries these coolies or their " bosses " were probably responsible for the immigration of so many of their countrymen to the southern goldfields that opposition was aroused, and restrictive legislation was passed by the Parliaments of South Australia, Victoria and New South Wales.[1] When the gold fever subsided, this legislation, so far as it was restrictive, was repealed.

[1] S.A., 1857; Victoria, 1855; N.S.W., 1861.

In 1875-6, however, the opening up of the Palmer Goldfields in northern Queensland proved an irresistible allurement to many of those Chinese reduced to an appalling misery by the Taeping rebellion and the subsequent disastrous floods. Before the end of 1876, Queensland miners found themselves surrounded by some 7,000 Asiatics—a group rapidly growing in numbers. The opposition of the miners was re-echoed by the Anti-Kanaka-labour party of Brisbane, until in August-September the " Gold Fields Bill " was introduced in the Queensland Assembly, The nominal object of the Bill was to compel Asiatic aliens to contribute an additional sum to the revenue in return for the protection they enjoyed on the Gold Fields, but its real object was to restrict their entry into the Northern State. They were already feared as an " economic danger." But the economic interests of Great Britain in China had become too complex since the hypocritical Treaty of Friendship, 1860, to permit of a political rupture. Moreover, French and German rivalry in the Far East had already begun. Governor Cairns having therefore refused his assent to the Bill, the Agent-General in London was authorized to present it to Lord Carnarvon. The latter's reply was determined by " treaty obligations." " I may observe that although the fifth article of Peking especially refers to Chinese engaging to take service in the colonies and to giving them liberty to emigrate for that purpose, it is obvious that the article contemplates that all Chinese subjects should have full freedom of entry into British dominions without special restrictions or impediments."[1] The interests of Queensland were to be subjected to the Treaty obligations, i.e., the commercial ambitions of Great Britain. The Agent-General said in reply, " As British subjects we value the privileges we possess, but if we are called on to sacrifice our hopes of perfecting a community founded on the principle of social and political equality, we are not content to do so without a most earnest effort to avert such a calamity."

It was evident to the Premier of Queensland that the subject was one for the consideration of all the Australian Governments. But these latter were concerned with their local problems, and were not as yet vitally interested in the Chinese question. The circular letter to the Premiers was merely acknowledged by Tasmania. South Australia asked for further particulars. Victoria, under the masterly influence of Mr. Graham Berry, was " not unmindful of the grave national danger. . . . The rights and responsibilities of self-government as possessed by law should be jealously guarded " ; N.S.W. was sympathetic and " prepared to support any well-devised and temperate measure." Public opinion in the Southern States was as yet indifferent—the events of the next few years roused it to a tense hostility.

For in Queensland the Liberal Government, 1877, asserted the

[1] Correspondence read in the House : Chinese Immigration Bill, 1877. Also Herslet's Treaties.

right of a community to control its immigration and passed the "Chinese Immigration Bill."[1] The right to limit the numbers of Chinese immigrants and to impose a poll-tax seemed to the Governor more plausible than the right to discriminate between European and Chinese miners. He gave his assent to the Bill. The inevitable result was that the tide of Chinese immigration turned to the Northern territory or the Eastern coast.

In the Southern States the Trade Union Movement, fearing unequal competition, organized to preserve the "standard of life." It is difficult to explain the immediate reaction of the mass of the Australian people to the fear of a Chinese influx without prefacing one's remarks by an account of the epic struggles of the Emigrant Fathers against the continued endeavours of the squatter-party to exclude them from that economic and political freedom they had come so far to seek. Such an account is impossible here. It must be enough to insist that hatred of squattocracy, of convictism, of indenture-systems, had left an indelible mark on the Australian consciousness.

The thirteen weeks' strike of the New Seamen's Union against the Asiatic Steam Navigation Co., which had proposed to secure coolie labour for the recently-opened service with the East, was successful, and led immediately to the first Inter-Colonial Trade Union Conference, 1879. When the failure of the Government of New South Wales, 1879, to force a Restriction Bill through the Council allowed the entry of some hundreds of Chinese,[2] a mass meeting of the "noisy section of the community" was held (April 26th, 1880) to institute an Anti-Chinese League. The Victorian Democrats agitated against political deterioration. In the debate on the "Chinese Voters Bill," 1880, Mr. Graham Berry maintained "There is nothing the people of this country desire more than to put a check on the influx of Chinese and their deterioration of the ballot." Unused to political privilege they seemed heedless of democratic progress. Liberal feeling was aroused by capitalist exploitation of "brute votes."

Hence the resolution for protective measures passed at the Premiers' Conference, December 1880-January 1881,[3] and forwarded to the Colonial Secretary, had a popular authority. The Premiers further protested against the action of the West Australian Council in introducing Chinese labour, ". . . a course so calculated to isolate her in the civilizing process." Before the close of 1881 all the States except Tasmania had restrictive barriers.[4]

A national consciousness was struggling into being. The very necessity of securing social continuity was developing a social

[1] Chinese immigrants were limited to one to every 10 tons shipping; £10 poll tax was also imposed.

[2] 1,406 were reported between January 18th-June 8th. *Vide* N.S.W. Hansard, 1881, Questions.

[3] Papers of Inter-colonial Conference, 1881.

[4] N.S.W. and Vic.: one Chinese to 100 tons, £10 poll tax; N.Z. and S.A.: one Chinese to 10 tons, £10 poll tax.

purpose. " In Australia the British race have before them an experiment in working out British institutions under circumstances more favourable than in any other part of Her Majesty's Dominions; . . . this new Empire must be united on terms of a just and enlightened equality," Mr. H. Parkes declared during his tour through the United States, 1882.[1]

But it must not be thought that these measures were unopposed even in Australia. There were still a great number of Anglo-Australians who regarded the Australian States as English counties. To them as to Mr. G. Reid " there is not the slightest doubt that the mere fact of Treaties of Friendship and Commerce . . . makes any measure of this kind a violation of the spirit if not the letter of those arrangements." And the Treaty obligation of Great Britain must be honoured. Again, the *Sydney Morning Herald* voiced the opinions of those on whom " the Cobden medal weighed heavily," for whom all protective measures were anathema. *Laissez-faire, Laissez-aller!* were not all men brothers ? And finally there was a strong capitalist class which continued to demand cheap labour. They were influenced, too, by the possible value of China as a commercial market. In the South Australian Council they were sufficiently powerful to keep the Northern Territory open for the exploitation of cheap coolie labour.

Thus the Chinese issue was already grouping the Australian people into one or other of two as yet ill-defined classes. Those who continued to oppose restrictive legislation were, in the main, those who had a " British " consciousness. They became the advocates of Imperial Federation. Opposed to them were the " Young Australians," determined at all costs to protect their high " Standard of Life " ; more and more aware of the necessity of Australian union ; more and more determined that the future of the Empire should be that of a Britannic Alliance. It was the latter group that, during the intervening years, gathered to itself the strength that triumphed in 1888.

To explain the attitude of the Australian people in the crisis of 1888, the influence of public events, 1881-88, should be understood. That influence, complex though it was, has certainly been exaggerated. It is well to remember that local issues, such as Tariff Protection and Land Reforms, continually distracted attention from high politics. Moreover, the evidence does not seem to substantiate the view that the annexation of New Guinea by the Queensland Government, or the Monroe Doctrine in the Pacific, as set out in a resolution of the Inter-Colonial Conference, 1883, had much popular support. The facts were too remote. As an article of the *Bulletin*—a national paper of considerable influence in the 'Eighties—asserted, December 15th, 1883 : " The people of Australia don't care a snap of the fingers about the annexation of New Guinea. Hadn't you better annex Australia first! . . . Is Great Britain to signify to the

[1] *Fifty Years in the Making of Australia.* H. Parkes.

world a prohibition against colonization in the South Pacific? . . . We do not believe the intelligence of Australia would endorse a proposition at once so arrogant, so narrow-minded, so cowardly." This extreme statement was probably an exaggeration also. But in so far as the Australian people cared about the subjects under discussion at the Conference, it was to protest against the intention of France to transport *récidivistes* to the Pacific Islands. This was the racial complex. The circumstances connected with the annexation of New Guinea are interesting, however, in so far as " British indifference " made northern capitalism aggressively national. It even rallied to a banner of independence. At the same time the Premier, Mr. Dalley, was responsible for an event, usually disregarded, but of no small importance in the growth of a national sentiment in N.S.W.—the offering, in a moment of poetic enthusiasm, of an expeditionary force for the Soudan campaign, 1885. This handful of men did more than capture a donkey: they introduced Democracy to Imperialism. Even the *Sydney Morning Herald*, March 7th, 1885, was forced to admit " there has been a decided reaction in feeling." The overwhelming defeat of Mr. Dalley, in the September elections, was in large part the measure of this disapproval. The terrifying appearance of the Russian bogey during the absence of the troops strengthened the antagonism to an Imperialist venture.

Yet, however one reckons the influence on Australian development of these events, considered independently, there can be no doubt that collectively they emphasized the weakness of Australia's defence. It was a difficult situation. The Young Democracy was essentially non-militaristic and non-imperialistic. Yet it was driven by circumstances to accept the naval proposals of the British Government discussed by the Australian Premiers at the first Inter-Colonial Conference, London, 1887.[1] The proposals were distinctly unpopular in the various State Legislatures. . . . " If we must have a navy, let it be a distinct Federal navy " ; . . . " in the name of common-sense let us cherish the feeling that responsibility for the welfare of our land rests on ourselves. . . ." The Queensland Legislature rejected the Bill.[2] But in the Southern States the majority recognized the force of the one determining factor. " There is a great deal to be said for the people on the other side," Mr. G. Reid admitted, " but this is the conclusion at which I have arrived: the Great Powers of Europe are trying to get every inch of territory they can. If we had to march to Western Australia to face France or Germany, many would pray for the support of the backbone of a great nation." The agreement was only binding for ten years. In the meantime a Federal Constitution might be drafted—the Federal Council being, for all practical purposes, abortive.

Thus the temper of the Australian people had considerably

[1] Australian States were to pay the cost of maintenance of a number of British warships in the Australian seas.
[2] Accepted, 1891.

changed since 1881, when a crisis arose in that problem which stands out unique and sphinx-like in Australian history, "irritating and agitating all classes and operating in the most intense way on those least informed."

The partial defeat of the French in 1882 had given an enhanced prestige to the "awakening Empire" and veiled in a mysterious largeness the Marquis Tseng's attempt to organize a naval force. And, further, the visit in 1887 of General Wungho, Chinese Ambassador, in consequence of the report of the Investigation Committee of 1886, advising on the establishment of a Consulate-General in Australia, quickened the apprehension that the "peaceful invasion" was to take a new and systematic form. The annexation of Burmah offered new facilities for the obtaining of naturalization papers. In 1884 the Anti-Coolie League in Queensland had forced the Government to severer restrictive measures; in 1885 the seamen had been on strike with the Pacific Mail Steamship Company over the coolie question; during 1881-6, 3,103 Chinese[1] had entered Victoria; in Tasmania, 1887, the Victorian Bill, 1881, had been adopted; even the West Australian Government had agreed, 1886, to a protective barrier. The problem was already serious when the Colonial Secretary sent his circular note[2] enclosing the protest of the Chinese Ambassador in London (Leu Ta-jên) against "the exceptional and exceptionable laws which some of the Colonial Legislatures of Australia and the Dominions have at different times enacted against Chinese subjects." He "hopes that with a view to the elimination of any part of them which may be found at variance with Treaty obligations and International usage, Her Majesty's Government will be pleased to institute an inquiry. . . ." General Wungho had presented an adverse report against discriminating legislation obtaining in Australia and Canada. The replies forwarded to Lord Knutsford by the State Governors admitted of no misinterpretation. The recent success of the negotiations between the United States and Chinese Authorities to provide for the absolute exclusion of Chinese labourers from the States for twenty years emphasized the failure of the British Authorities to secure similar protection for the Australian people. "While these and other British colonies have no direct voice in the contracting of Treaties between the Empire and Foreign Powers, they are frequently affected by obligations imposed by them, and it is therefore not unreasonable to expect that, in such cases, efforts should be made by those on whom the exercise of that power devolves to watch over and conserve the right and interests of colonies more immediately interested."[3] Repeated telegrams attested the rising temper of the masses. But events did not await the convenience of the Colonial Office.

[1] C. 5448. No. 44.
[2] C. 5448 is a useful Blue Book on crisis 1888.
[3] C. 5448. No. 44.

At the end of January the Government Resident in the Northern Territory called attention to the exceptional influx of Chinese expected there. "I ventured to express the opinion that it appeared a very likely fact that the Chinese Government was privy to what was taking place in the Northern Territory" (Mr. H. Parkes to Premier, S.A.). The South Australian Parliament being in recess, the Government issued a proclamation imposing a £10 tax on all Chinese entering the Northern Territory, and declaring all Chinese ports infected. As a result the wretched immigrants were taken down the East Coast. The master of the s.s. *Afghan* proceeded to Port Phillip. On May 1st a public meeting in the Town Hall, Melbourne, had unanimously resolved on the necessity of £100 poll tax. On the arrival of the *Afghan*, a deputation, hastily appointed, urged the Premier to prevent the landing of any Chinese. There were some 268 of these latter on board. Apart from those carrying naturalization papers, many of which were forged, this was much in excess of the legal number. The master was told that if any Chinese landed he would have to pay the heavy fine he had incurred. He did not insist. The Premier had acted "strictly within the limits of the law." The *Afghan* made for Sydney harbour, and on the eve of its arrival two mass meetings held in the Town Hall were followed by a procession, the chief magistrate leading, to Parliament House. The Premier was bidden to assume the prerogative of Sovereignty. The immigrants were forbidden to land. "It was equivalent to an Act of Independence." All standing orders of the House were cancelled for the next day in order to obtain Parliament's indemnity "for all acts done by the Executive in connection with the Chinese immigrants." A panic measure limiting the number of Chinese immigrants to one for 500 tons shipping and imposing £100 poll-tax was passed in a single sitting. However, a writ of habeas corpus having been taken, the Supreme Court declared the Executive action illegal, and all Chinese holding exemption tickets were allowed ashore. There were no further demonstrations. Leu Ta-jên vehemently protested to Lord Salisbury against "the arbitrary and irregular proceedings of the Colonial Authorities." Idle protests. "In none of the Australian colonies would the artisans and labourers have sufficient power or influence to obtain restrictive legislation on this question if they were not aided by the conviction of a majority of the other members of the community that such legislation is necessary for its present and future welfare" (Attorney-General of Tasmania).[1] The proposal of the S.A. Premier that an Inter-Colonial Conference should be called to discuss the situation and devise, if possible, some policy which should be acceptable to the Chinese Authorities and themselves, was therefore welcomed by the Colonial Secretary. In this Conference "they have not overlooked the political and commercial interests of the Empire, nor the commercial interests

[1] C. 5448. Enclosure No. 70.

of the Colonies.[1] . . . The suggestion that any restrictions which are to be imposed should be of a general nature, so as to give power to exclude European and American emigrants, has been very carefully deliberated upon, but no scheme for giving effect to it has been found practicable." There was, nevertheless, a general desire to put no unnecessary obstacles in the way of Treaty negotiations, and while the limitation of one immigrant to 500 tons was accepted, the poll-tax was dropped. Except in Tasmania, the various legislatives accepted the principle of the amendment.[2]

Democracy had achieved its immediate purpose. The case taken before the Privy Council of Musgrave *versus* Ah Toy, in which Ah Toy sued the Controller of Customs in Melbourne for £1,000 damages, was lost by the Chinese. Lord Salisbury seemed to appreciate the situation, and on June 22nd, 1888, he wrote to Sir J. Walsham authorizing him " to place yourself without delay in communication with the Tsung li Yamên, and urge upon them that . . . the Chinese Government should adopt a course similar to that which they followed in the case of the U. States." [3] But nothing seems to have eventuated and the opportunity passed.

Already the exclusiveness of inter-State tariff barriers had proved an economic irritant. Parochialism was defeating its own ends. Now in the crisis the Australian people knew themselves. The hour seemed ripe for the word spoken by Mr. H. Parkes, at Tenterfield, October 25th, 1889: " The time has come when we should set about creating a great national Government." In 1891 a convention met and framed a Federal Constitution.

It was shelved. The bogies were dead. The drought and the strike had intervened. Everywhere were apparent public indifference, political impotence. Federation might have been postponed until forced by the necessity of immediate danger, had not two new factors developed a determining influence.

In the first place there was the growing power of Japan. The 1894 Treaties had given the people of the Rising Sun a new status. Japanese lovers could no longer hang their verses on the cherry-blossom branches—they were busy with the instruments of " progress." Bent on economic development, hundreds of them were reported (1895) as immigrating to Queensland and the Northern Territory. The Government Resident in the territory declared " they will soon change the character of our maritime population." They were said to be monopolizing the pearl fisheries ; offering cheap labour, they were entering the sugar plantations as labourers, and the towns as mechanics and merchants. They were feared as the Chinese were feared—only more so. The new " Japanese problem " was aggravated by the continued presence of some

[1] 1886. Total exports of States to China valued £16,000 ; imports from China, £846,000. C. 5448, No. 78.
[2] S.A. lowered the tonnage. As result Q. imposed a poll tax ; it was vetoed.
[3] C. 5448, no. 85.

thirty thousand Chinese[1]; by the rapid immigration of Hindoos, and by the growing numbers of Kanakas who, freed from contract, were moving through the States in search of work. Women on the lonely inland were terrified; workmen in the towns were agitating. "There is no doubt the question has seized hold of the population to an extent unwarranted by facts." "I do not know a subject on which the feeling of the electors is more united or strong" (Mr. G. Reid, 1896). The resolution of the Premiers, who met in Conference, January-February, 1896, to discuss the terms of the Treaty of Commerce and Navigation signed by Great Britain and Japan (London, July 16th, and Tokio, August 25th, 1894),[2] was to be expected. The Chambers of Commerce urged acceptance of the Treaty in the interests of trade; the masses demanded its rejection for the security of opportunity. Instead of resolving on a commercial friendship it was agreed by all the states except Queensland that the terms of the Chinese Immigration Acts should be extended to include all Asiatics. The Capitalist Government of Queensland, triumphant since the Labour defeat, 1890-91, advanced the argument of the Tropics and decided on accepting the Treaty subject to a proviso permitting either party to regulate by law the immigration of labourers.[3] The Treaty was ratified as between Queensland and Japan, March 16th, 1897. Meanwhile the Governments of N.S.W. and S.A. accepted the Chinese Immigration Amendment Bill agreed upon at the Conference of Premiers. The Bills were vetoed by the Crown. The diplomatic relations between Great Britain and Japan were very different to those existing between Great Britain and China. Moreover, the restriction of Indians affected the unity of the Empire. At the Inter-Colonial Conference, London, 1897, Mr. Chamberlain proposed to tread the maze by a subterfuge: "We quite sympathize with the determination of the white inhabitants of these colonies which are in comparatively close proximity to hundreds of millions of Asiatics that there should not be an influx of people alien in civilization, alien in religion, alien in customs, whose influx moreover would most seriously interfere with the legitimate rights of the existing labour population . . . but we ask you also to bear in mind the traditions of the Empire which makes no distinction in favour of or against race or colour, and to exclude by reason of their colour or by reason of their race all Her Majesty's Indian subjects, or even all Asiatics, would be an act so offensive to those peoples that it would be most painful, I am quite certain, to Her Majesty to have to sanction it."[4] He proposed the acceptance of the principle of the language test adopted by Natal. The proposal was adopted in a Bill passed in Western Australia, 1897, and in N.S.W., 1898. It was discussed by S.A. and Victoria,

[1] At Census, 1911, 37,442 Asiatics in Australia.

[2] Treaty 1894 was not binding on the self-governing Dominions unless separately accepted by them. Canada accepted it, 1906.

[3] Immigration of labourers regulated by a passport system.

[4] C. 8596, *Alien Immigration.*

but it had become obvious that the subject was one for a national, not state, legislature, and should be postponed until Federation.

Meanwhile the definite drafting of a new Federal Constitution was hastened by the second factor. Conservatism had discovered in the Federal project the opportunity of "a check to democratic progress." The conflict of political principles roused the Trade Unions to immediate activity—of the struggle was born the Federation of Australia. "We are, every one, members one of another" (Mr. Deakin).

"At this early period of our history we find ourselves confronted with difficulties which have not been occasioned by union, but to deal with which this union was established. Certainly no motive operated more powerfully in dissolving the technical and arbitrary political divisions which previously separated us." So Mr. Deakin spoke in the debates on the Commonwealth Immigration Bill introduced into the Federal Assembly, 1901-2. From 1877-1901 the principle adopted by the States in relation to Asiatic immigrants was one of restriction. From 1901 onwards that principle gave way to one of total exclusion effected by means of a language test. Japanese Consuls in Australia and Baron Hayashi, Japanese Ambassador in London, protested against "a measure which makes an educational test a means to discriminate between Japanese subjects in favour of other nationalities." But the Bill was assented to and with few amendments[1] still obtains. It embodies the "White Australia" policy.

In adopting the shibboleth "White Australia," the Australian people have been unjust to their own cause. It implies mere colour prejudice, and as such is resented by Asiatics and condemned by Europeans. But it is something much more fundamental. It is a policy that, rightly or wrongly, the Southern community has believed and still believes necessary for the security of its social life.

[1] Japanese students and merchants can enter the Commonwealth since 1906 on a passport system.

An Analysis of the New International Frontiers in Central and Eastern Europe

By E. W. Shanahan, *Ex-research Student.*

The break-up of the Austro-Hungarian Empire and the carving of the Baltic States out of Western Russia have caused a number of new countries to appear on the map of Europe in the broad isthmus between the Eastern Baltic and the Eastern Mediterranean. It would seem as if the irregular patch-work quilt arrangement, formerly peculiar to the Balkan Peninsula, had been extended by the Peace settlements over the whole of this intermediate belt of Europe, and as if a perverse spirit had inspired the Treaty-makers to multiply to the utmost the length of international frontiers. It is worth inquiring into the actual increase in these frontiers, as much to show that the percentage increase is smaller in reality than in appearance, as to afford some justification for the arrangements made.

Let us examine the area lying to the south of the New Poland first. The length of the pre-war land frontiers of Austria-Hungary including Bosnia-Herzegovina was about 3,300 miles, while that of the frontiers of Serbia with countries other than Austria-Hungary was about 700 miles, and that of Rumania with Russia about 400 miles, thus making a total of about 4,400 miles. Under the new conditions the following States in this area have frontiers to be considered: German Austria, Czecho-Slovakia, Rumania, Hungary, Poland (southern frontier), and Jugo-Slavia. For the purpose of estimating the difference in length of frontiers here, the new frontiers of the first two may be taken as representing the gross increase; because the southern boundary of Poland is then accounted for, and because the new western frontier of Rumania is about equal in length to the old western one, and its new eastern frontier shows no increase in length. It is noteworthy that the throwing together of States in Jugo-Slavia has caused a shortening of frontiers in that region of about 425 miles, as explained below. When the lengthening of frontiers through the emergence of German Austria and of Czecho-Slovakia is balanced against the shortening produced by that of Jugo-Slavia, the result is approximately the difference required, and the frontiers of Rumania and Hungary and the southern frontier of Poland can be neglected.

In accordance with this plan the following estimates are given, in approximate figures. The increase in frontiers in the new

German Austria is 440 miles, i.e., an increase of 540 miles of new frontiers with Czecho-Slovakia, Hungary and Jugo-Slavia, diminished by the 100 miles of shortening of frontier with Italy. The increase in frontiers in the new Czecho-Slovakia is 150 miles, i.e., the difference between the length of the new frontiers with Poland, Hungary and Rumania, and that of the old frontier of Austrian Galicia with Russia and Rumania. Thus far there is a net increase of 590 miles. The decrease in frontiers in the area of Jugo-Slavia is 425 miles, obtained by taking the sum of the new frontier with Hungary not already reckoned and the increase in the new North and South Italian frontier (280 miles) from the sum of the vanished Serbian frontiers with Hungary, Bosnia and Montenegro (705 miles). This gives a net total increase of 165 miles in the region formerly occupied by Austria-Hungary, Serbia, Rumania and Montenegro, or an advance of only $3\frac{3}{4}$ per cent. on the pre-war frontiers.

When, however, the new frontiers of Poland other than the southern, are considered, the increase of the new upon the old becomes appreciable, and this increase is naturally still more marked with the inclusion of the new frontiers of the Baltic States. Thus, again in approximate figures, the new western frontier of Poland with Germany is 500 miles and the new eastern one with Russia 700 miles. When this total of 1,200 miles is reduced by the length of the old frontier between Russian Poland and Germany, 600 miles in length, the net increase is 600 miles. This added to the increase already obtained for the southern region gives a total increase of 765 miles of frontier on a pre-war total of 5,000 miles, or $15\frac{1}{2}$ per cent. The Baltic States yield a net increase in frontiers of 735 miles, obtained by subtracting the length of the old eastern frontier between East Prussia and Russia (130 miles) from the sum of the eastern frontiers with Russia and of the new inter-State frontiers, namely 865 miles in all.

The total increases in land frontiers, for which the Peace Treaty arrangements are responsible in this belt of Europe, amount therefore to about 1,500 miles, while the pre-war land frontiers were about 5,130 miles. The increase of 29 per cent. would be a trifle less, if the sea frontiers which have not changed in length, however assigned, were included. In the above only a limited number of European countries have been considered, namely those most affected by the Peace Treaties, but they among European countries have predominant land frontiers. The percentage increase in *land* frontiers for the whole continent as a result of the Peace changes lies somewhere between 12 per cent. and 15 per cent., but the whole increase is the merest fraction of the total land and sea frontiers combined.

The Relative Importance of Co-operative, Multiple and other Retail Traders

Illustrated by the Sale of Government Butter

By Sydney M. Bushell, *Research Student.*

For the purposes of this enquiry it has been necessary to adopt an exact definition of a multiple shop. A number of similar shops under one ownership constitutes a multiple shop organization; the large store with a number of departments under one roof is really a multiplicity of shops and is therefore not included in the definition. The typical multiple shop company may own as many as 900 branches; it sells a limited number of stereotyped articles and is managed in a stereotyped fashion from a central office with a system of travelling managers. The local managers working under the travelling managers are merely foremen and are allowed very little initiative, as all wholesale buying is done by the central office and the selling price is likewise settled there. But a classification according to system of management has proved impossible as this varied very much; accordingly a multiple shop has been defined as one owned by an organization having a number of branches each doing a similar kind of trade, thus including all grades from the small shop-keeper who, having been successful with his first venture, opens branches in neighbouring districts, to the large joint stock company with branches in every town, which owns the factories where its goods are made and reaps the full advantage of buying on a large scale. The Ministry of Food defines a multiple shop as an organization having six or more branches; this definition is arbitrary, but a line must be drawn somewhere, and as sellers of Government butter are classified under this heading, it is necessary to adopt it. The branches may all be in the same town or scattered over several divisional areas; provided that there are six of them, their position does not matter.

The Ministry of Labour estimates that the result of its enquiry into the distribution trades will show that there are about 500,000 shops of all kinds, employing in all about 1,250,000 people. The object of this enquiry has been to find a basis upon which some reliable estimate can be formed as to the proportion of this distributive trade at present in the hands of multiple shops, co-operative stores and the ordinary private trader respectively. In order to make a complete analysis and comparison of the effectiveness of each form

of distribution particulars were sought of the capital, turnover, number of organizations, of shops, and of trades covered, the population served, and the area where each form of distribution was found most successful. Two sets of figures, if collected at an interval of, say, a year, would give an interesting comparison of the rate of progress of all three methods. If it were possible to obtain particulars of the number of staff needed, with the aggregate amount of their wages and the average number of customers served by them in each of the three methods of distribution, it would be possible to draw some interesting and useful conclusions as to which method is most economical in saving labour and whether the benefit of the economy goes to the employees, the customers, or the owners of the business.

With regard to the co-operative societies all the information wanted is obtainable, and the investigation has been easy as they are affiliated to the Co-operative Union, which has a statistical department and publishes an exhaustive collection of figures of all kinds, giving their capital, turnover, number and distribution of members, etc. The materials for these are taken from the returns furnished by each society to the Registrar of Friendly Societies, and include all societies whether affiliated to the Co-operative Union or not. The societies have perhaps less temptation than other concerns to make their balance-sheets appear more favourable than they really are, and in addition their books are open to inspection and therefore the figures may be relied upon.

There are 1,364 distributive co-operative societies in the United Kingdom ; these own between them 6,200 branches or shops, and their capital in 1919 amounted to £65,737,980 ; their turnover in that year was £155,157,963, and their number of members was 3,846,531. In some cases people belong to more than one society and consequently are duplicated in the total, but it is estimated by the Co-operative Union that if 100,000 is deducted this will allow for the persons who have been counted twice. The number of members is not indicative of the number of families served by co-operative stores, as frequently more than one member of a family belongs to a society, but as 10,682,685 persons, or more than a quarter of the sugar-buying population of Great Britain, were registered for sugar with co-operative stores in 1919, we may conclude that this number are largely supplied with foodstuffs from the same source. An idea of the growth of the movement may be obtained from the fact that the membership has increased by 1,095,896 persons since 1912, and the turnover has almost doubled in the same period.

All kinds of goods are sold by co-operative societies, though articles of food have first place. The members do not confine their custom to their society's shops, they may prefer to obtain certain articles elsewhere, and in many cases their society does not stock all the goods they need.

As regards the area served, co-operative shops are found in varying numbers all over Great Britain. They flourish in districts such as Durham, Lancashire and the neighbourhood of Glasgow, where there is some big industry like textile weaving or coal mining which gives steady employment to a large urban population of the thrifty artisan class ; but in rural districts such as Cambridge and Northern Scotland, the population is too scattered and too badly paid to be able to join a society. London is the apparent exception to this rule, but this is because it has no large staple industries except in Woolwich, where there is a flourishing society. Its population is badly paid and moves about so frequently that to join a society is impossible. In 1911 Clackmannan headed the list with 26 per cent. of its population members of co-operative societies, Durham came second with 13·3 per cent., while Rutland came last with only ·6 per cent. and several of the Highland Counties of Scotland had no members at all. Where a large proportion of the population are members, the stores are large and cater for most of their customers' wants, consequently in these districts they are found to spend a larger amount per head and in Durham each member averages £36 9s. per year, but in Rutland, where the stores are scattered, the members are obliged to buy from other sources and consequently only spend half that amount.

The ordinary retail dealers are so unorganized as to make it impossible to attempt to get any complete and reliable information from their trade associations, but having got figures of co-operative trade, if similar figures of multiple shop trade were obtainable, the amount of trade done by the private dealer would be merely a question of subtraction from the total trade of the country.

The real difficulty has been to get any information about multiple shops. Their Federations collect no general statistics and each firm is naturally most unwilling to give such information as it possesses, mainly because each is afraid of giving away trade secrets and also because they are afraid of legislation.

Having come to a *cul-de-sac* with regard to information about multiple shops, it was found necessary to narrow the enquiry and confine it to the trade done in one or more articles of universal necessity preferably rationed, and to obtain the information if possible from the Ministry of Food. Sugar seemed the most suitable commodity, but unfortunately it is impossible to obtain figures of sugar consumption arranged under the three headings. The figures for butter are the only ones available.

Butter has disadvantages as a guide because the figures here given relate solely to Government butter which is entirely imported. The people who buy home produced butter are not enumerated, which may account for the small number in North Wales and South Western England who buy Government butter, the remainder are probably supplied from farms in the locality. The consumption of butter also varies in different classes of life and margarine is used as

Table I

Showing the percentage of population buying Government Butter from Multiple Shops, Co-operative Stores, and Private Dealers.

Divisional Food Areas.	Resident Population.	Per cent. of Resident Population Buying Butter.	Total Persons Buying Butter.	Butter-buying Population.			Number of Multiple Shop Branches.
				Multiple Shops.	Co-operative Shops.	Private Dealers.	
N. (Northumberland and Durham).	Thousands. 2,160	Per cent. 95	Thousands. 2,052	Per cent 19	Per cent 48	Per cent. 33	458
N.E. (Yorkshire).	4,073	91	3,730	21	36	43	779
N.W. (Cumberland, Westmorland, Lancashire and Cheshire).	6,236	88	5,492	24	32	44	1,290
N.M. (Lincoln, Notts, Derby, Leicester, Northants, Rutland).	2,777	89	2,481	20	27	53	338
M. (Stafford, Salop, Warwick, Worcester, Hereford).	3,396	93	3,180	21	18	61	474
L. (London).	4,466	95	4,249	36	5	59	786
E. (Norfolk, Cambridge, Hunts, Bedford, Suffolk).	1,315	89	1,108	18	19	63	145
H.N. (Essex, Hertford, Middlesex).	2,993	93	2,788	33	12	55	568
H.S. (Kent, Surrey, Sussex).	2,604	91	2,389	29	10	61	625
S.M. (Bucks, Oxford, Berks, Wilts, Hants, Isle of Wight).	1,912	89	1,718	27	15	58	318
S.W. (Gloucester, Somerset, Devon, Cornwall, Dorset).	2,354	73	1,740	15	22	63	260
N.W.*a*. (Flint, Denbigh, Anglesey, Carnarvon, Montgomery, Merioneth).	496	64	318	19	13	68	59
S.W.*a*. (Radnor, Cardigan, Brecon, Carmarthen, Monmouth, Glamorgan, Pembroke).	2,103	88	1,865	13	21	66	236
S.E. (Aberdeen, Berwick, Clackmannan, Fife, Forfar, Haddington, Kincardine, Kinross, Linlithgow, Midlothian, Peebles, Perth, Roxburgh, Selkirk, Stirling).	1,983	80	1,768	16	30	54	272
S.G. (Argyll, Ayr, Bute, Dumfries, Kirkcudbright, Lanark, Renfrew, Wigtown).	2,539	95	2,412	15	33	52	442
S.I. (Banff, Caithness, Elgin, Inverness, Nairn, Orkney, Ross, Cromarty, Shetland, Sutherland).	353	82	290	7	3	90	12
	41,760,000	90%	37,581,000	23·5%	23%	53·5%	7,082

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a substitute, consequently only 90 per cent. of the population are registered as buyers of Government butter.

Each shop which sells Government butter has a separate permit, but the permits for multiple shops are all applied for under one name, hence it is known how many branches are owned by each firm, in what Food Division they are situated, and how many customers are registered with each. There are 150,000 permits issued, and of these multiple shops take 7,082, co-operative societies take about 5,500, so that roughly about 137,000 shops are owned by private traders. (See Table I.)

The number of multiple shops is greater than shown in the figures for several reasons:

1. All multiple shops do not sell butter; the larger organizations usually sell only a few articles and there are two concerns each with over 100 branches which sell no butter.

2. There are two multiple shop organizations with between them over 100 branches, and there may also be others, which adopt a policy of taking their branch managers into partnership, thereby combining the advantages of large organization with the personal management and interest of the private trader. In these cases each manager takes out his permit in his own name and consequently is classified among the private traders.

3. There is a tied-house system, whereby certain wholesale concerns lend money to retailers; this is the usual way of wiping off a bad debt. The former owner of the shop remains in his old position, but is supervised and controlled by the wholesale firm. It is impossible to gauge the extent of this as the former owner applies for his permit separately as before, and is not likely to wish his position to be known.

4. A variation of the tied-house system is adopted by at least one firm of multiple shops with over 100 branches; they buy up grocery businesses, reorganize them, and install a manager, but keep the old name.

5. There must be a number of potential multiple shops with five branches and under, at present returned as private traders, which only need the addition of another branch or so to be included under multiple shops.

Co-operative shops have no need for the qualifying remarks applied to multiple shops; they all sell butter and the estimated number of their permits, viz., 5,500, gives the total number of their grocery and provision shops.

The records of the Ministry of Food have yielded an interesting analysis of multiple shop concerns, classified according to their branches and number of customers, which may indicate the size of organizations showing the greatest efficiency. (See Table II.)

In this table it will be noticed that the larger number of organizations have from ten to nineteen branches, after which there is a marked falling off. It is apparently the highest efficiency point of the ordinary one-man concern.

TABLE II.—Classification of Multiple Shop Organizations according to the number of their Branches for which Butter-selling Permits were issued. November, 1919.

Permits Issued.	Number of Organizations.	Total Number of Permits Issued.	Total Number of Customers served.
From 6 to 9	35	254	136,500
,, 10 ,, 19	52	702	422,200
,, 20 ,, 29	22	533	388,300
,, 30 ,, 49	9	363	174,800
,, 50 ,, 99	11	742	559,800
,, 100 ,, 149	9	1,050	998,800
,, 150 ,, 249	3	648	643,400
,, 250 ,, 900	5	2,790	5,461,900
Totals ...	146	7,082	8,785,700

The firms having the smallest number of branches are not by any means always those having the smallest number of customers. This is due partly to the efficiency of their organization and partly to the kind of trade, which may be limited to a few articles, of which butter is one, or extended to general grocery.

TABLE III.—Classification of Multiple Shop Organizations according to the number of Butter Customers registered with them in November, 1919.

Number of Customers Served.	Number of Organizations.	Total Number of Permits issued.	Total Number of Customers served.
1,000—	12	103	16,900
2,000—	8	78	20,200
3,000—	15	148	51,900
4,000—	15	155	65,600
5,000—	10	130	55,700
6,000—	6	79	38,600
7,000—	7	92	51,700
8,000—	8	153	68,500
9,000—	4	41	37,800
10,000—	4	113	42,600
11,000—	3	67	34,400
12,000—	3	62	37,900
14,000—	4	125	60,500
16,000—	2	124	32,900
18,000—	7	253	133,900
20,000—	8	329	153,200
25,000—	4	174	105,400
30,000—	3	187	112,600
40,000—	3	73	138,800
50,000—	3	285	163,900
60,000—	2	241	131,500
80,000—	5	494	450,100
100,000—160,000	3	468	413,100
200,000—500,000	4	1,019	1,268,600
Above 600,000	3	2,092	5,099,400
Totals	146	7,082	8,785,700

Dependants on Women Wage-Earners

By Margaret H. Hogg, *Assistant in the Statistical Department.*

The question of women's wages and their relation to those of men is of vital importance, affecting an increasing number of industries directly, and all others indirectly. At the present day the tendency in fixing wages is to base them on the necessary expenditure of the recipient, and we find in consequence many statements of varying import about the demands usually made upon a woman's income, and especially the extent to which that income is partially expended on others. It can hardly be doubted that the range of cases, from the earner who has no need of any wage for himself to the one who has to support a large group of dependants, is of equal extent for both sexes, but the relative prevalence of different types of case is a point on which many opinions and but little data are found. Hence it seems desirable that any information on this subject which can be obtained should be gathered into serviceable form.

The Fabian Women's Group made an investigation into this subject in the course of their study of the economic position of women, and the material which they collected was published in 1915, in a pamphlet on *Wage Earning Women and their Dependants*, by Miss Ellen Smith. This material came from four sources ; from the enquiries made in Northampton, Warrington, Stanley and Reading, under the superintendence of Dr. A. L. Bowley, from information provided by two voluntary societies in Outer London, from an enquiry amongst married women workers in several large and smaller towns particulars of which were furnished by the Women's Industrial Council, and from 2,830 forms received from women workers in varied occupations in all parts of the country which were issued by the Fabian Women's Group themselves.

Mr. Seebohm Rowntree instituted, in the autumn of 1919, a very detailed and careful inquiry in a considerable number of industrial towns into this same subject, the results of which will shortly be published. In his book, *The Human Needs of Labour*, he gives the results of a small preliminary enquiry in 1917-18. Answers to a questionnaire were then obtained from 516 organized women workers over the age of 18 taken quite at random, including women in lodgings as well as women living at home. From his description of the results it is evident that a larger majority of women were unmarried than in the present case, as might be expected from their being entirely " organized." In fact, in spite of the higher age

limit for women in Mr. Rowntree's enquiry, his percentage of married or widowed women included is 19 as against 23 in the present tabulation. His method also differs from this in estimating whether the worker was actually contributing to the maintenance of others, not whether she should have been if her wage allowed it. Thus only some of the cases dealt with in the present tabulation would be included in his.

The principal data for the present investigation have already been mentioned as the first source of the Fabian Women's information, except that figures for a fifth town, Bolton, of which the cards have since been tabulated, have here been added; the material has, however, been handled after a somewhat different plan, so that the result will be found at least partly new. Broadly speaking, the Fabian Women investigated what the woman earner's position as to the support of others or herself might be supposed to be, from the relation of her wage at the time to those of any other earners, and from the number of dependent children and adults in the household. The women have been tabulated as not wholly supporting themselves, just supporting themselves, or partially or wholly supporting others. If earning as much as 8s. a week, they have generally been regarded as at least self-supporting, and if the family earnings apart from theirs were sufficient to keep the family at a high standard of living, they have not been regarded as helping to support others. Between these two limits the criterion used for their division into the three groups named above has been the inferiority, equality or superiority of their wages to the average income per head of the family, obtained by dividing the total income of the family by the number of persons in it. Evidently this is an artificial method, supposing, as it does, that all members of a family have equal needs.

In undertaking the present tabulation, on the other hand, it has been thought advisable to keep the question whether or no there are dependants, for whose support a woman earner might be responsible entirely, distinct from all consideration of the adequacy of her wage, thus showing what wage she has need of rather than the adequacy or inadequacy of that actually received at the time, especially as the extent to which the wage was inadequate could not be inferred from tables such as those of the Fabian Women's enquiry. It might be argued that even to take into account the amount of any men-earners' wages in estimating the responsibility of women earners for the support of others is to introduce a disturbing factor, as any change in the men's wages would at once affect the result, but the influence of this factor may be estimated from Table II below, which shows the reasons for the women's responsibility. Emphasis must be laid on the fact that throughout this paper, in speaking of women's responsibility this term is used not as something that cannot be evaded, but rather to imply a generally recognized moral obligation.

The outcome of the difference in method may be exemplified by three hypothetical situations in which a woman would be classed

successively as helping to support others, self-supporting, and not self-supporting in the Fabian Women's tabulation, while in the present one she would uniformly have partial responsibility. In a household consisting of a man and wife and four children, two of school age and two younger, the man earns 16s. a week and the rent is 3s. a week. According to the Fabian Women's tabulation, if the woman earns 7s. the family wage is 23s., the average per head is 3s. 10d., and she is helping to support the family. If she earns 3s. 3d. she is just self-supporting, and if she earns 3s., the family wage is 19s., the average per head is 3s. 2d., and she is not self-supporting. According to the present tabulation, after paying the rent the man has not enough left to support himself and the children according to the minimum standard chosen, so that the woman has partial responsibility whatever her wage, owing to the inadequacy of his. On the other hand, supposing a man and wife to have two children of school age and one younger, the rent to be 4s., and the woman's wage 7s., whether the man's wage was 13s. or 23s. the woman would be helping to support the children according to the Fabian Women's tabulation (unless, indeed, in the latter case the man's wage was considered high enough to keep the family at a comparatively high standard of living, but about this standard no information was given). In the present tabulation the woman would be partially responsible in the first case, because her husband's wage would not pay the rent and adequately support himself and the children, but in the second case she would have no responsibility.

The contention of the Fabian Women's Group is that their method gives " a very accurate estimate of the part played by the woman as bread-winner in the family of which she forms a part." Does it not seem, however, that though the relationship thus obtained to the rest of the family may be accurate enough, when we proceed to collect women from different households so many variables come into play that the basis of comparison is very difficult to comprehend, if indeed it has any meaning.

Less fundamental differences in treatment between this tabulation and that of the Fabian Women's Group are that only women in working-class households are included here, and that in the Fabian Women's tabulation no woman has been regarded as the sole supporter if even a child was earning, while in this no earner under the age of 16 has been supposed to help in the support of anyone else. In connection with this supposition that earners under the age of 16 keep themselves and no more, it should be noted that in Bolton they were usually earning quite good wages, and might well in fact be contributing to the support of others. Hence, although the boys and girls earning good wages were not often found in the most necessitous families (possibly because boys and girls in these had a worse physique), the Bolton figures yet acquire a slightly different significance from those of the other towns.

To state in detail the two sources whence the material for investi-

gation with respect to the responsibility of women earners for the support of dependants has been drawn : the first is the cards of the Enquiries by Sample into the Economic Conditions of Working-Class Households in the five towns of Northampton, Warrington, Stanley, Reading and Bolton, described in *Livelihood and Poverty* (by A. L. Bowley and A. R. Burnett Hurst), and the second is extracts made in the Census Office from the sheets of the Census of Population in 1911, where in the seven boroughs of Bradford, Bristol, Leeds, Newcastle-on-Tyne, Bethnal Green, Shoreditch and Stepney one household in fifty was taken. In both these cases the towns were carefully chosen as representative of different types, hence their results may be expected to be fairly characteristic of industry as a whole in this country.

In the former, where a *Particular Classification* (see page 73) more sensitive than the *General* one (see page 74) for the other seven towns has been possible, we have a sample of one in twenty in the first four towns, and of one in ten in Bolton. The card for each household was filled in by the investigator, who noted the age, sex, and relationship to the head of the household of each member of it, the occupations, wages, and hours of work of the earners, the rent, any source of income other than wages, and any other salient information elicited. In all cases the description by the investigator of the relationships of the members of the household has been adhered to. This causes a slight lack of uniformity in the classification of members of households where the family relationships are of a complicated nature, and where it is not obvious who should be called the head of the family, but to co-ordinate all cases completely would be a laborious process, and the proportion of cases affected is small. Lodgers and domestic servants have not been included in the classification, as information is lacking as to any possible support given by them to others.

The definition of a woman earner presents some difficulties, as in some cases wives are recorded as earning very little, in one only 9d. a week. The course followed has been to include all women earning at all, thus adopting the principle of deciding a woman earner's responsibility from the circumstances of her family apart from all consideration of the adequacy of her wage, but to keep a separate count of those earning less than 7s. a week, who were certainly not in a position to support more than themselves. The separate record of those earning less than 7s. gives a general indication of the extent to which women's wages were inadequate, although the cases of wives who have no responsibility for the support of others and who are earning less than 7s. have no direct bearing on the question of the adequacy of women's earnings, since as they have no necessity to earn anything it is probable that they are not earning as much as they could if they wished.

As in the original tables in *Livelihood and Poverty*, earners temporarily unemployed through illness or any other cause are regarded as earners, not dependants, and their wages are counted in the

family income, except in a few cases where the investigator departed from this rule, and the earner temporarily unemployed was classed as a non-earner. Earners less than 16 years of age are regarded as supporting themselves, but as never having any responsibility for the support of others, it being supposed that they earn their keep, but do not contribute to the rent and other general expenses of the household. Sons and daughters over sixteen years of age who are earning are supposed, beyond supporting themselves, to contribute 1s. a week each towards rent and other general expenses, so that before deciding whether the householder's wage is adequate for the support of his dependants, 1s. is subtracted from the rent for each son or daughter over 16 who is earning. Non-earners in receipt of any pension or allowance (other than Poor Relief, which is only allowed when the wages of the earners are insufficient), or possessed of private means, are not regarded as dependants, even if the pension or allowance is not really adequate for their support by the standard adopted.

As regards support given by members of one household to persons living in another, which is not recorded, there will be few cases of it among women earners, except among domestic servants and lodgers, whom we have excluded. The obvious possibilities are a wife contributing from her earnings to the income of her father's household although having one of her own, or women earners of a family helping a married member of it living elsewhere. There is no means of finding them, but cases of regular and considerable remittances of this kind will not be numerous, and there is in them a lesser degree of obligation than that in the cases dealt with in this classification. Regular remittances from members of the family away from home are recorded on some of the cards, and where this is the case, and a woman is the sole earner in the household she has been reckoned as having only partial responsibility.

Women earners have been classified as :

w ... wives or widows.
d ... daughters over 16.
f ... other women over 16.

These have been grouped again according to their responsibility for the support of dependants, i.e., as having :

α ... total responsibility.
β ... partial responsibility.
γ ... no responsibility.

α. Where only one earner over 16 is recorded, the total responsibility for the support of dependants rests on him or her.

β. (i) Women earners over 16 in households where the father or husband is not earning, but in which there are other earners over 16, have partial responsibility for the support of dependants.

β. (ii) Women earners over 16 in households where the father or husband does not earn enough to support the dependants (according to the Minimum Standard described in *Livelihood and Poverty*), or

where he is away from home and does not contribute enough, have partial responsibility.

γ. (i) If the father or husband is earning, women earners have no responsibility for the support of dependants except in the case β. (ii).

γ. (ii) Earners under 16 have no responsibility for the support of dependants.

In the cases of partial or total responsibility each class of woman earner (w, d, or f) has been tabulated :

(i) According to the number of adults and children to be supported.

(ii) According to the cause of responsibility.

(*a*) Death of father or husband.

(*b*) Permanent unemployment of father or husband.

(*c*) Inadequacy of wage of father or husband, or inadequacy of support sent by him if away from home.

In the case of towns where the data are taken from the Census, the material is inadequate for the production of tables similar to those just described, and the tables given are not comparable with the former group. The only facts here relevant extracted were for each person in the household, the age, sex, whether occupied or not, while the apparently principal wage-earner and his wife were distinguished. Consequently it has been necessary to assume that in every case where there is a man over 20 years of age earning, women earners have no responsibility for the support of dependants ; that if there is no man over 20 earning, and there is more than one earner over 16, each such earner has partial responsibility ; and that if there is one sole such earner, he or she has total responsibility for the support of dependants. Hence in this general classification many women are recorded as having no responsibility where in the former particular one they would have been partially responsible owing to the inadequacy of the man's wage, or owing to the death of the father where a son over 20 is earning. In order to show how far the two methods differ, the details for the five towns have also been tabulated in exactly the same way as was necessary with the Census extracts. While in the Special Classification about 28 per cent. of all women earners have partial responsibility, in the General Classification the percentage is only 8. For total responsibility the percentages are practically the same according to both classifications.

As in the case of the other towns, earners under 16 are regarded as supporting themselves but having no responsibility for the support of others, and any non-earners said to have private means, or any pension or allowance other than poor relief, are not regarded as dependants. As, however, private means or pensions are recorded only as alternatives to occupation, there will be cases where such exist but are not recorded. It is probable that in the *Livelihood and Poverty* enquiries income from such sources sometimes escaped the investigator, although the error so caused will be less than that in the tables given from the Census material.

Some of the women classified as earners in the five towns might have returned themselves as non-earners in the Census, so that a slight disparity between the results of the two groups may have crept in, but this will not in any case be very large.

The re-tabulation of the women earners in the former five towns according to the general less sensitive classification makes possible a general view of an aggregate of the women earners in all the towns included, covering by sample 230,000 women earners. Account has been taken in this aggregate of the sizes of the samples in the various enquiries, so that each town might have representation proportional to the number of women earners which the sample leads us to infer in the town. (For Tables see end of article.)

Of the tables given here, Tables I, II, III, and V deal with the particular classification, Table IV deals with the particular and general classifications contrasted, and Tables VI and VII deal with the general classification.

Table I gives the number having each degree of responsibility of each of the three groups of women, and Table II the cause of such responsibility. In Table III we have the prevalence of different groups of dependants in the five towns, on all women earners, and on wives and widows only, and in Table IV the average number of adults and children dependent according to each classification. Table V shows the percentages of women in the four towns and in an aggregate of the five having various degrees of responsibility according to the special classification, and Table VI those in all the towns, and in an aggregate of them all according to the general classification. (As Stanley has too few cases to yield percentages it is only included in the aggregate in these two tables.) Table VII gives the number of women having the different degrees of responsibility, and the average number of adults and children dependent on those partially and wholly responsible, in all the towns and in an aggregate of them according to the general classification. The two classifications are contrasted in Table IV and in Tables V and VI. As has already been said, in the cases of total responsibility the figures resulting from the two methods correspond closely, while in the cases of partial responsibility the average numbers of dependants diverge somewhat more, and the percentages having partial responsibility are utterly incomparable, the number in the particular classification being on the whole three times that in the general one.

Under the particular classification, at least half the cases of partial and of total responsibility are where there are no children dependent. Under the general classification the Metropolitan Boroughs are sharply differentiated from the rest, as in them more than half the cases are where children only are dependent, while in the other eight towns (excluding Stanley, where the cases are very few) at least half the cases are where adults only are dependent. The different situation in the Metropolitan Boroughs may be accounted for by their high birth-rate and short span of life.

From the particular classification it appears that the commonest case of a woman's responsibility is where the father or husband is dead, and she has one adult to support partially, and that one-third of the women earners have some degree of responsibility for others. It may be well to show here the proportion of earners to all women of 16 years and over ; to the nearest tenth these are : Stanley, ·1 ; Warrington, ·2 ; Reading and Newcastle, ·3 ; Northampton, Bolton, Bristol, Bradford, ·4 ; Stepney, Bethnal Green and Shoreditch, ·5 ; and Leeds, ·6. For the aggregate it is ·4.

Comparing the results obtained by the particular tabulation with those of the Fabian Women's Group, we may see that from the four towns for which the results are based on the same material, the proportion of women earners having some degree of responsibility is roughly the same. In the aggregate containing also the three other enquiries, however, the proportion obtained is entirely different, as more than half of the women earning are helping at least to support others. This great difference is probably due more to the relative weight of the results of the various enquiries than to the difference of the criteria in the individual cases. In the main tables drawn up from the Fabian Women's own enquiry, the majority of the women included were in professional not industrial employment, and as this enquiry contributed more than half of the total, the professional women would seem to be disproportionately well represented. Secondly, one may suppose that a fair proportion of married women are included in the other investigations, whence the inclusion of an enquiry exclusively amongst married women which contributes over one-sixth of the aggregate would give them an undue preponderance. It is questionable, thirdly, whether Outer London is not also given an excessive weight, yielding as it does nearly one-seventh of the cases, while one would expect that group to have quite peculiar characteristics. In these three enquiries the resulting proportion of women having responsibility is strikingly greater than that in the four common towns, and as in our general classification the seven boroughs agree fairly well with the five towns, one would be inclined to expect, in absence of other evidence, that they would agree in other methods of tabulation too.

From these several considerations one may argue that the result of the Fabian Women's enquiry is not representative of the country as a whole, and that their figure of 51 for the percentage of women earners supporting others in part or entirely is too large for an estimate of the general situation.

It will be seen that the present tabulation has taken a middle way, for turning now to Mr. Rowntree's preliminary enquiry we find there one woman earner in six partially or wholly maintaining others (14·3 per cent. partially and 2·5 per cent. totally). The proportion is only half that reached in the present tabulation, and the causes of the discrepancy are not in this case so easy to trace as in that of the Fabian Women's enquiry. The information gathered from the

forms included the wage earned, whether the earner was married, single or widowed, whether she lived at home, whether her parents were alive, the wages and ages of other members of the household, the rent, the money paid by her for board, lodging and laundry, and other payments to dependants with particulars of those dependants. Account was also taken of separation allowances and payments by husbands engaged in civil work away from home. With respect to the use of this material, Mr. Rowntree writes: "With a knowledge of the usual charges paid by working girls for board and lodging in different types of working-class houses, and with answers to the above questions, it was possible to ascertain quite definitely whether a worker was or was not partially or entirely responsible for the maintenance of others." Details of the course adopted in making this classification are not given, but it is evident, although the age limit of 18 instead of 16 has no doubt some modifying influence, that the more important cause of divergence is the different conception of responsibility underlying the tabulation. For Mr. Rowntree has regarded as responsible for others the women earners who were economically in a position to shoulder such responsibility, not all those whose family circumstances made dependants need help from them. Thus women whose households were in the same necessitous condition might some be responsible and others not, according as they received more or less than a living wage according to his criteria. Mr. Rowntree's numbers are rather small to allow of comparisons of the proportions in subdivisions, but the most common case of support, a woman earner partially supporting one adult, comprises in his enquiry 11 per cent. of the cases and in the present tabulation 13 per cent. While, owing to the smallness of the numbers in Mr. Rowntree's enquiry, it is possible that the closeness of this agreement is owing to an accident of the sampling, a lesser dissimilarity might be expected in this case than in the whole enquiry, when one reflects that where a woman has one adult, usually a parent, partially dependent, she is more likely to have attained her full wage, and thus to be able to contribute support, than where there are young children. For the proportion of earners who are wives or widows is small, and if an unmarried woman is found in a family with children dependent she is usually their sister, and will probably be young too, and not have reached her full industrial value. Hence more cases caught in the present tabulation would slip through in Mr. Rowntree's where there are children dependent than where there are only adults. No similar comparisons can be carried out in other cases of responsibility to develop this argument, as the numbers in them become too small.

Whatever the comparative merits of these two ways of approaching the question of women earners' liability, both have their interest and value, and there is room for much work in the subject in all its aspects. Mr. Rowntree's more recent enquiry, larger in its scale than the preceding ones, must be a valuable contribution to the study of the question, and we await its publication with interest.

In the following Tables women earners over 16 only are included:

w is used to denote wives or widows;
d ,, ,, ,, daughters over 16;
f ,, ,, ,, other women over 16.

For definitions of Partial and Total Responsibility, see p. 72.

NORTHAMPTON

Particular Classification

TABLE I.—Degree of Responsibility of Women Earners.

Degree of Responsibility.	w.	d.	f.	Total.	Proportion.
No Responsibility (All)	**66**	**162**	**18**	**246**	*·70*
(Earning less than 7s.)	26	10	1	37	
Partial Responsibility (All) ...	**9**	**85**	**1**	**95**	*·27*
(Earning less than 7s.)	6	5	—	11	
Total Responsibility (All)	**6**	**3**	**1**	**10**	*·03*
(Earning less than 7s.)	2	1	—	3	
Total Earners	**81**	**250**	**20**	**351**	*1·00*
(Earning less than 7s.)	34	16	1	51	*·14*

TABLE II.—Cause of Responsibility of Women Earners having

(i) *Partial Responsibility*

Cause of Responsibility.	w.	d.	f.	Total.	Proportion.
Death of father or husband ...	3	25	—	28	*·29*
Unemployment of father or husband	1	33	1	35	*·37*
Inadequate wage of father or husband	5	27	—	32	*·34*
From All Causes	9	85	1	95	*1·0*

(ii) *Total Responsibility*

Cause of Responsibility.	w.	d.	f.	Total.	Proportion.
Death of father or husband ...	4	1	1	6	*·6*
Unemployment of father or husband	2	2	—	4	*·4*
From Both Causes	6	3	1	10	*1·0*

Particular Classification

TABLE I.—Degree of Responsibility of Women Earners.

Degree of Responsibility.	w.	d.	f.	Total.	Proportion.
No Responsibility (All)	**28**	**100**	**2**	**130**	·65
(Earning less than 7s.)	10	22	1	33	
Partial Responsibility (All) ...	**9**	**51**	**3**	**63**	·32
(Earning less than 7s.)	8	15	1	24	
Total Responsibility (All)	**2**	**4**	—	**6**	·03
(Earning less than 7s.)	—	1	—	1	
Total Earners	**39**	**155**	**5**	**199**	1·00
(Earning less than 7s.)	18	38	2	58	·29

TABLE II.—Cause of Responsibility of Women Earners having

(i) *Partial Responsibility.*

Cause of Responsibility.	w.	d.	f.	Total.	Proportion.
Death of father or husband... ...	1	30	3	34	·54
Unemployment of father or husband	4	4	—	8	·13
Inadequate wage of father or husband	4	17	—	21	·33
From All Causes	9	51	3	63	1·0

(ii) *Total Responsibility.*

Cause of Responsibility.	w.	d.	f.	Total.	Proportion.
Death of father or husband... ...	1	2	—	3	·5
Unemployment of father or husband	1	2	—	3	·5
From Both Causes	2	4	—	6	1·0

Particular Classification

TABLE I.—Degree of Responsibility of Women Earners.

Degree of Responsibility.	w.	d.	f.	Total.	Proportion.
No Responsibility (All)	**2**	**9**	—	**11**	·7
(Earning less than 7s.)	1	5	—	6	
Partial Responsibility (All) ...	**2**[1]	—	**1**[2]	**3**	·2
(Earning less than 7s.)	2	—	1	3	
Total Responsibility (All)	**1**[2]	—	—	**1**	·1
(Earning less than 7s.)	1	—	—	1	
Total Earners...	**5**	**9**	**1**	**15**	1·0
(Earning less than 7s.)	4	5	1	10	·7

[1] Responsibility owing to unemployment of father or husband.
[2] Responsibility owing to death of father or husband.

READING

Particular Classification

TABLE I.—Degree of Responsibility of Women Earners.

Degree of Responsibility.	w.	d.	f.	Total.	Proportion.
No Responsibility (All)	**53**	**90**	**8**	**151**	*·65*
(Earning less than 7s.)	39	43	2	84	
Partial Responsibility (All) ...	**18**	**41**	**5**	**64**	*·28*
(Earning less than 7s.)	11	12	1	24	
Total Responsibility (All)	**10**	**6**	—	**16**	*·07*
(Earning less than 7s.)	2	2	—	4	
Total Earners...	**81**	**137**	**13**	**231**	*1·00*
(Earning less than 7s.)	52	57	3	112	*·48*

TABLE II.—Cause of Responsibility of Women Earners having

(i) *Partial Responsibility.*

Cause of Responsibility.	w.	d.	f.	Total.	Proportion.
Death of father or husband	7	16	4	27	*·42*
Unemployment of father or husband	6	7	—	13	*·20*
Inadequate wage of father or husband	5	18	1	24	*·38*
From All Causes	18	41	5	64	*1·0*

(ii) *Total Responsibility.*

Cause of Responsibility.	w.	d.	f.	Total.	Proportion.
Death of father or husband... ...	5	5	—	10	*·62*
Unemployment of father or husband	5	1	—	6	*·38*
From Both Causes	10	6	—	16	*1·0*

BOLTON

Particular Classification

TABLE I.—Degree of Responsibility of Women Earners.

Degree of Responsibility.	w.	d.	f.	Total.	Proportion.
No Responsibility (All)	**311**	**809**	**233**	**1,353**	*·67*
(Earning less than 7s.)	53	10	13	76	
Partial Responsibility (All) ...	**54**	**463**	**38**	**555**	*·27*
(Earning less than 7s.)	17	5	—	22	
Total Responsibility (All)	**41**	**63**	**17**	**121**	*·06*
(Earning less than 7s.)	3	3	—	6	
Total Earners...	**406**	**1,335**	**288**	**2,029**	*1·00*
(Earning less than 7s.)	73	18	13	108	*·05*

TABLE II.—Cause of Responsibility of Women Earners having

(i) *Partial Responsibility.*

Cause of Responsibility.	w.	d.	f.	Total.	Proportion.
Death of father or husband	37	303	35	375	*·676*
Unemployment of father or husband	5	102	2	109	*·196*
Inadequate wage of father or husband	12	58	1	71	*·128*
From All Causes	54	463	38	555	*1·0*

(ii) *Total Responsibility.*

Cause of Responsibility.	w.	d.	f.	Total.	Proportion.
Death of father or husband... ...	37	50	15	102	*·84*
Unemployment of father or husband	4	13	2	19	*·16*
From Both Causes	41	63	17	121	*1·0*

TABLE III.—Aggregate of Northampton, Warrington, Stanley, Reading, and Bolton.[1]

Particular Classification.

Numbers of Adults and Children dependent

(a) *On All Women Earners having*

Partial Responsibility.

Dep'ds over 14.	Dependants under 14 years.							Totals.
	0	1	2	3	4	5	6	
0	—	39	13	7	8	2	2	71
1	232	34	18	18	16	11	7	336
2	42	13	15	6	7	4	—	87
3	7	1	1	—	—	—	—	9
Totals...	281	87	47	31	31	17	9	503

Total Responsibility.

Dep'ds over 14.	Dependants under 14 years.						Totals.
	0	1	2	3	4	5	
0	—	12	9	3	—	—	24
1	45	2	3	2	2	2	56
2	11	1	—	1	—	—	13
3	1	—	—	—	—	—	1
Totals ...	57	15	12	6	2	2	94

(b) *On Wives and Widows having*

Partial Responsibility.

Dep'ds over 14.	Dependants under 14 years.							Totals.
	0	1	2	3	4	5	6	
0	—	19	7	4	6	1	2	39
1	14	—	1	2	2	2	1	22
2	—	1	3	—	—	—	—	4
Totals...	14	20	11	6	8	3	3	65

Total Responsibility.

Dep'ds over 14.	Dependants under 14 years.						Totals.
	0	1	2	3	4	5	
0	—	10	7	4	—	—	21
1	11	—	2	—	3	1	17
2	2	—	—	—	—	—	2
Totals...	13	10	9	4	3	1	40

[1] The Bolton figures have been halved before addition, as the sample there was 1 in 10.

TABLE IV.

Particular and General Classification.

AVERAGE NUMBERS OF ADULTS AND CHILDREN DEPENDENT ON WOMEN EARNERS HAVING

(i) *Partial Responsibility.* (ii) *Total Responsibility.*

	(i) Partial Responsibility.				(ii) Total Responsibility.			
	Particular Classification.		General Classification.		Particular Classification.		General Classification.	
	Adults.	Children.	Adults.	Children.	Adults.	Children.	Adults.	Children.
Northampton	1·1	1·1	1·2	·8	·8	·7	·8	·7
Warrington...	1·1	1·6	1·1	1·3	1·1	·5	1·2	·5
Reading	·9	1·6	·7	·9	·7	1·2	·8	1·4
Bolton	1·1	·8	1·0	·5	·9	·7	·7	·9
Aggregate of Five Towns[1] ...	1·1	1·1	1·0	·7	·9	·8	·9	·8

[1] Stanley has been included, and the figures for Bolton halved before addition.

TABLE V.—Particular Classification. Percentages.

Degree of Responsibility of Women Earners.

	No Responsibility.	Partial Responsibility.	Total Responsibility.
Northampton	70	27	3
Warrington...	65	32	3
Reading	65	28	7
Bolton	67	27	6
Aggregate of Five Towns[1]	67	28	5

TABLE VI.—General Classification. Percentages.

Degree of Responsibility of Women Earners in All Towns.

	No Responsibility.	Partial Responsibility.	Total Responsibility.
Northampton	90	7	3
Warrington...	91	6	3
Reading	84	10	6
Bolton	81	13	6
Aggregate of Five Towns[1]	84	11	5
Bradford	90	7	3
Bristol	89	6	5
Leeds	91	4	5
Newcastle-on-Tyne ...	89	5	6
Bethnal Green	90	6	4
Shoreditch	89	6	5
Stepney	84	9	7
Aggregate of All Towns[2] ...	88	7	5

[1] Stanley has been included, and the figures for Bolton halved before addition.

[2] On account of the different sizes of samples, the Bolton figures have been halved, and those of the seven boroughs multiplied by 2.5, before addition, in order to secure uniform representation of the several towns.

TABLE VII.

General Classification.

DEGREE OF RESPONSIBILITY OF WOMEN EARNERS IN ALL TOWNS, WITH AVERAGE NUMBERS OF ADULTS AND CHILDREN DEPENDENT.

	Adult Women Earners having			Average Number of Dependants supported			
				Partially		Wholly	
	No Responsibility.	Partial Responsibility.	Total Responsibility.	Adults.	Children.	Adults.	Children.
Northampton	315	26	10	1·2	·8	·8	·7
Warrington	182	11	6	1·1	1·3	1·2	·5
Stanley	11	3	1	[1·0]	[3·0]	[1·0]	[—]
Reading	194	24	13	·7	·9	·8	1·4
Bolton	1,640	266	123	1·0	·5	·9	·7
Aggregate of Five Towns[1] ...	1,522	197	92	1·0	·7	·9	·8
Bradford	773	60	24	1·0	·4	1·1	·2
Bristol	630	44	34	·7	1·0	·8	1·2
Leeds	884	40	53	1·0	·5	1·0	·5
Newcastle-on-Tyne	339	19	24	1·0	·3	·7	·9
Bethnal Green	329	22	13	·3	1·1	·5	1·5
Shoreditch	287	21	16	·4	1·3	·7	1·1
Stepney	487	50	41	·6	1·1	·5	1·4
Aggregate of All Towns[2] ...	10,844	837	604	·8	·6	·8	·8

[1] The figures for Bolton have been halved before addition.

[2] On account of the different sizes of samples the Bolton figures have been halved, and those of the seven boroughs multiplied by 2.5, before addition, in order to secure uniform representation of the several towns.

Recent Contributions to Political Science

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Signs are not wanting that the sovereign state of the classic political philosophy has now reached its apogee. What, broadly speaking, it represented was an attempt to justify a single form of social organization against attempts at the assertion of freedom expressed either in individual or corporate terms. It was a natural attempt; for the dominant individualism against which it was a protest had no positive conception of political action. In such a background, the effort of men like Green and Bosanquet to make the state the ultimate expression of social good was inevitable enough; and the fact that it was, for purposes of law, the one compulsory form of association suggested its superiority to all other groups of men.

The inspiration of Green and Bosanquet was drawn most largely from Rousseau and the Platonic school, with the result that their analysis was conceived in somewhat abstract terms. They did not, that is to say, dissect the state in terms either of the functions it performs or of the way in which its task is in practice achieved. They were content to demonstrate that the state must have a will; and they identified its purpose with the good of the community. The state thus became the organ through which the general will received expression; and every other group which set itself against the state was obviously less universal in its scope. The real result, accordingly, of this movement was twofold. It revivified the Greek conception of the relation between the individual and the state. It made the individual, that is to say, derive his meaning only from his state context. It made all groups less than the state itself secure their rights not from the fact that they had come to be, but from the purely secondary issue that the state conceded them permission to exist. The normal pre-eminence of the state thus became the very basis of the social order. Nor was this all. Hardly less important was the relation of this outlook to the law. A foundation in ethics was here provided for the Austinian theory of sovereignty. The state was sovereign, not on the low ground of being the ultimate source of legal reference, but on the much more formidable basis that its supremacy was essential to the fulfilment of its purpose. Inquiry was not made into the degree to which that purpose was being fulfilled. The adherents of the sovereign state were too

occupied with the splendour of what the state was trying to be to attempt the more mundane task of measuring its achievement.

The main characteristic of the last decade in political philosophy has been the reaction from this outlook. It was a reaction inevitably to be expected. Of the social zeal of men like Green and Bosanquet no man can make denial; but theirs was a static philosophy unsuited to a time when dissatisfaction with the social order impelled men's minds to change. For it is worth while noting as a general truth that any political philosophy of which the basis is Hegelian will work only when the mass of men is contented with the policy of the state. Even then, of course, its theoretic validity is contestable; and once the period of contentment is overpassed a more complex view of social relationships is destined to assert itself.

The criticism of the last ten years has broadly taken three forms. All of them have come as a reaction in the name of freedom against the sovereign state; and two of them at least envisage a definitely pluralistic theory of social structure. The most complete of these analyses is that which seeks its foundations in the history of political ideas. Like all theories of the state, indeed, it has with its main exponents a particular object in view unconnected with the generalizations it involves. What it has done is to analyse the circumstances in which the modern state arose and to show that its sovereignty is, for the most part, simply the weapon by which it sought relief from the trammels of the Church. But just as the Church so dominates the life of the Middle Ages as to become an impossible tyrant, so does the state use weapons forged for a single and special purpose to ends which need a separate scrutiny before they can be admitted as legitimate. With Figgis, for example,[1] the argument takes the form of a protest that so long as the state is sovereign the freedom of churches is impossible. A Church of which the head is Christ cannot accept the dictates of a secular assembly or a secular court; and it must urge its independence of all sovereignty other than its own until it can secure its own corporate life. From such a view, it is but a single step to the hypothesis that the position of any organization, whether it be state or trade union or church, must be won by moral pre-eminence and not by an *a priori* legal power. In such a background the sovereignty of the state is destroyed at a single stroke. The individual becomes the centre of a system of allegiances between which, should conflict arise, it is his business to choose. Citizenship then finds its essence not in obedience to the command of the state, but in the analysis of it; and a possible rejection of that command must be envisaged should its moral substance be deemed inadequate.

Broadly speaking, the type of social order towards which this view is making its way is a reconstruction of the mediæval idea of the state as a *communitas communitatum*. It has behind it a very solid basis of historic experience. The unified power which is the

[1] Cf. *From Gerson to Grotius* (1907); *Churches in the Modern State* (1913). Dr. Figgis is an Anglican. For a similar Nonconformist view, cf. Roberts, *The Church in the Commonwealth* (1916).

postulate of the sovereign state is in patent disharmony with the individuality of men. It assumes identity of interest between them which is in direct contradiction with the facts. It demands uniformity as its instrument, and uniformity, as we know both from the history of Oriental civilization and of the Roman Church, is the parent of unthinking stagnation. Any institution that has the legal power to command will unconsciously identify its legal power with moral right; and the obvious safeguard against its abuse is the erection of alternative avenues of allegiance through which effective protest can be made.

In this respect, the protest against the sovereign state is essentially a stage in the history of toleration. It is, above all, the affirmation that we need a democratic interpretation of the principles of authority. It is an attempt, through the organization of group-loyalties, to prevent the individual from reduction to insignificance in a world where only corporate action can hope for effectiveness. The dangers to which such an attitude lies open is obvious enough. Consciously, it is a threat against order. Consciously, also, it offers a loophole to what may well resolve itself into revolution. But that is the inevitable result of any philosophy which attempts to replace an order founded upon legal rights by an order founded upon moral right. A society which is able to admit the protest of its members has at least more securely safeguarded itself against disruption than one in which fundamental dissent, being excluded, eats its way to the foundations of the state.[1]

And this attitude secures at least some measure of support from the Socialist interpretation of the state.[2] Orthodox theory gives the state pre-eminence because the aspect of man that it expresses is common to us all. For the state as a philosophic conception there is neither Jew nor Greek, neither bond nor free. We meet there upon the common ground of identical citizenship. That is why the state is held to be the ultimate expression of the social bond. All other forms of organization have a certain partial character about them. The state embraces all men by its territorial nature. It is universal because it is the one compulsory form of association.

Some validity to that argument few Socialists would deny when it is viewed merely as a protection against external attack, but it is argued that when we move to the more complex problems of internal arrangement, it has no necessary validity. Internal change is always movement against the interests of an existing order which the sovereignty of the state is, as a matter of history, used to preserve. Its legal rights are merged, without the necessary inquiry,

[1] For the modern statement of the case against this view, cf. Zimmern, *Nationality and Government* (1918) and, in a distinctly mediæval way, cf. Lord Eustace Percy in his *Responsibilities of the League* (1919), esp. pp. 275 ff.

[2] Cf. especially N. Lenin, *The State and Revolution* (1919). G. D. H. Cole, *Social Theory* (1920). S. & B. Webb, *A Constitution for the Socialist Commonwealth of Great Britain* (1920).

into ethical justification. Some, as Hobbes, may argue that the price of resistance is always greater than the values it obtains. Others, as T. H. Green, may argue that we confront the state in fear and awe because ultimately it will come to summarize the best of ourselves. Yet the simple fact is that from the standpoint of internal arrangement the true heart of a state is in its government ; and the unity it represents is not so much the interest of its subjects as a whole as of that part which dominates the economic life of its members. England, France, America, mean on domestic issues a complex of interests which struggle among themselves for survival. In any realistic analysis, there is no necessary unity of purpose between the groups we there discover. The wills we meet are aiming at achievement which often involves the destruction of the legal order maintained by government. There is no relevant unity between the England conceived by Mr. Smillie and the England conceived by the Duke of Northumberland. There is no ultimate common ground upon which the Trade Union Congress and the Federation of British Industries can meet. The will that in the sovereign state secures expression, seems always to be a partial will seeking less a common benefit than to use the vital organ of the state for its private purpose. The state, in short, is a class state ; and outside its occasional concessions, its instruments register a good not merely in fact, but in purpose also, more narrow than the teleology of the state would seem to warrant.

Socialists have therefore proposed a reorganization of the state which is entirely subversive of its sovereignty. Some, like Mr. Cole, propose to replace it by a system in which there are as many organs of supreme power as there are vital functions to be performed. Others, as Mr. and Mrs. Webb, propose a bipartite division of the state in which the balance of power between the parts will not only give different aspects of the state their due significance, but also secure the emergence of a broader liberty thereby. That towards which we seem to be moving is a conception of social organization in which the basis of social position will be function and not wealth.[1] The conquest of the productive process by labour will involve a separation of its interests as a unit of administration from those of the consumers ; and schemes like that of Mr. Justice Sankey for the coal industry are only instances of an economic federalism which is coming to be the basis of the scheme by which the Socialists propose to replace the capitalist order. Whether this federalism be envisaged in guild socialist terms or not, what it involves is the division of the sovereign power. And the movement is the stronger because its origins are to be sought not in the rarified atmosphere of metaphysical analysis, but in the solid facts of economic structure and administrative mechanics.

And it is precisely here that it joins the third great tendency of modern political science. No one can read the history of our

[1] Cf. R. H. Tawney's brilliant monograph, *The Sickness of an Acquisitive Society* (1920).

English *Staatslehre* without being impressed by the facile psychology with which it has been satisfied. Fear, as with Hobbes, self-interest, as with Bentham, habit, as with Sir Henry Maine—in the explanation of our institutions it is with some such simplicity as this that we have been presented. The dominant need of political philosophy has been the analysis of the complexity of motives by which the actions of men are determined. So far, indeed, we have got but little beyond the formulation of our questions. But at least we know that the work of the psychologists and of anthropology are fundamental. Mr. Graham Wallas has made finally impossible the reliance upon the Benthamite psychology which still holds sway in the economic domain. What we are coming to see is that the first need of any political order is the satisfaction of certain primary desires ; upon their basis are certain secondary desires, like love of property and of the good opinion of others, which move politically under the ægis of herd instinct. In such a background we begin to discover either that our present political organization thwarts the natural impulses of men or that the avenues through which they can secure satisfaction are socially wasteful to the community as a whole. This, for example, is the foundation of Mr. Tawney's admirable analysis of the modern order. It is the root, often unconsciously, of that discontent which in its ultimate form becomes a creed of revolution. No one can read studies like those of Rivers upon the Melanesians,[1] without the sense that the early history of man is too profoundly the clue to his habits for political science to adventure its neglect. And the more modern study of the unconscious suggests still further avenues of exploration. Psychology is likely to make political science more complex in the future ; but it will give it the surer ground of a foundation in the actual nature of men.

Here, it must be admitted, all conclusions as yet are tentative ; and the attack upon the sovereign state suffers hardly less than its antithesis from its vicious intellectualism. Mr. Cole and Mr. Webb, for example, consistently write as though a state may be envisaged in which the members are uniquely interested in the technical details of administration ; where the fact is that man by nature is a lazy animal who is most easily content with the obvious channels of satisfaction for his wants. What political science above all needs is inventiveness in the large problems of organization, an inventiveness more likely to proceed from such analysis as Lord Haldane's discussion, before the Coal Commission, of the technique of the civil service, than from the formal treatment of political theory. The *Staatslehre* of the next generation may well start from the assumption that the sovereign state has failed ; but the novelties by which the sovereign state is to be superseded are not less likely to suffer shipwreck unless their foundations are different in the sources from which they derive as well as the conclusions to which they tend.

[1] *The History of Melanesian Society* (1914).

School Notes

THE development of the new scheme for Commerce Degrees necessitated an increase in the teaching staff of the School, and in June last, the University of London made the following appointments under the terms of the Cassel Trust :

PROFESSOR GUTTERIDGE : Sir Ernest Cassel Professor in Commercial and Industrial Law in the University of London.

PROFESSOR DICKSEE : Sir Ernest Cassel Professor in Accounting and Business Methods in the University of London.

MR. T. E. GREGORY and MR. H. DALTON : Sir Ernest Cassel Readers in the University of London.

MR. L. R. JONES, MR. J. DRUMMOND SMITH and MR. T. A. JOYNT : Lecturers in Commerce in the University of London.

Mr. H. J. Laski and Mr. Herman Finer have also been appointed to the staff of the School during the year, the former as lecturer in Economic History and Public Administration and the latter as Assistant in the Department of Public Administration.

The total number of *full time* students enrolled in the Session 1920-21, up to December 15th, is 899, of whom 341 are working for the B.Sc. (Econ.), 232 for the B.Com. and 33 are research students working for higher degrees, such as M.Sc., D.Sc., and Ph.D. There are, in addition, 1,537 occasional, or part-time, students, making the total of all students attending the School this session, 2,436. There are 322 foreign and colonial students enrolled, of whom 129 are Indians ; and of this total 269 are taking full-time courses. These foreign students represent twenty-nine nationalities.

Sixteen students of the School passed the Final (Honours) Examination for the B.Sc. (Econ.) in 1920, and, of these, the following took First-Class Honours : Mr. A. R. Burns, Mr. D. J. Price, and Miss E. M. Richardson.

A School of Economics Research Studentship of £175 for one year has been awarded to Miss Leila Thomas, an M.A. of the University of Sydney, to enable her to carry on research into the Economics of the Convict System in Australia with a view to the presentation of a thesis on the subject for the degree of Ph.D.

The Degree of D.Sc. was conferred on Mr. Hugh Dalton by the Senate of the University of London at its December meeting.

The

London School of Economics and Political Science

(UNIVERSITY OF LONDON)

THE LONDON SCHOOL *of* ECONOMICS AND POLITICAL SCIENCE, founded in October, 1895, was admitted as a School of the University of London in the Faculty of Economics in 1900. It is the main centre for the teaching required in connection with the degrees in Commerce which have recently been established by the University. It is open on the same terms to men and to women.

The School provides complete pass and honours courses by day and by evening for the degree of Bachelor of Science in Economics (B.Sc.Econ.) and, in conjunction with University College, King's College, and other London institutions, for the degrees of Bachelor of Commerce (B.Com.) and Bachelor of Laws (LL.B.). The lectures and classes of the School are open also to those who have not matriculated and do not wish to pursue a full University course; in particular to those engaged in any branch of public life or of business, to civil servants and municipal officials, candidates for the Consular service, factory inspectorships and other official posts; to teachers and to those engaged in or qualifying for social work. To all these the School offers by day or evening the opportunity of specialized or advanced study.

The lectures, classes, and seminars deal with the following, amongst other, subjects: Principles of Economics and their application to Social, Industrial, and Business Problems; Statistics and Mathematics; Logic

and Scientific Method; Commerce and Industry, including Foreign Trade, Banking and Currency, Transport, Tariffs, Accountancy and Business Methods; History, general and economic; Geography; Commercial, Industrial, and Constitutional Law; International Law; Politics and Public Administration; Sociology; Ethnology; and Social Science and Administration.

The School also registers candidates for the D.Sc., Ph.D., and other higher degrees of London University, and offers special facilities for post graduate research under the supervision of professors or otherwise. The British Library of Political Science, which is maintained by the School, is open not only to those who are taking courses there but, by permission of the Director, to any person desiring to utilize it for research or consultation. It comprises now over 500,000 items, including a collection of 200,000 pamphlets and similar materials for research, many of them unique or difficult of access elsewhere. The Ratan Tata Department of Social Science and Administration is established at the School.

Dunford House, a country mansion with an estate of about 160 acres, situated near Midhurst (Sussex) and formerly owned by Richard Cobden, has recently been presented to the School, and is available for holidays, private study, and vacation courses for the staff and students of the School and others admitted by the School authorities. It is also available for conferences to be arranged by educational and other associations.

The Calendar of the School, containing full information, may be obtained (post free, 3s.) from

THE SECRETARY,
London School of Economics and Political Science
(*University of London*),
CLARE MARKET, LONDON, W.C. 2,
ENGLAND.

The Secretary will be glad, also, to give any special information desired.

Earners and Dependants in English Towns in 1911

By A. L. Bowley,
Professor of Statistics, University of London.

Very little is known accurately about one of the subjects which one might have expected to have found among the earliest of statistical investigations, viz., the composition of ordinary families with respect to sex, to age, and to numbers of earners and dependants and the relative numbers of families of various constitutions. The Population Census of 1911 classifies households according to the number of persons in them, and distinguishes the numbers below and above 14 years, but no further division by age, sex or occupation is made; the Census, in fact, deals primarily with individuals and not with households or families. It is true that we can construct an average household for any of the larger administrative divisions, by dividing the numbers at each age, sex, etc., by the "number of families or separate occupiers," and obtain such a result as "the average family or other Census group in the County Borough of Nottingham consists of 4·33 persons, of whom 2·01 are male, 2·32 female, 2·43 unmarried, 1·64 married, ·26 widowed, 1·27 under 15 years, 1·87 males and ·65 females are occupied," and so on in minute divisions; but when we ask in how many families a man had more than three children to support there is no means of obtaining an answer.[1] Such questions have become of more than academic interest since wage adjudications have turned on the supposed needs of a workman, and one aspect of the subject—the relative numbers of workmen who have certain numbers of children to support at any period of working-life—has been examined by Mr. Rowntree in his *Human Needs of Labour* in the light of information relating to 2,161 families in York. Much more detail and of a more general nature is to be found in *Livelihood and Poverty* (published for the Ratan Tata Foundation), where the constitution by sex, in age-classes, and as earning or not, is shown for every family in a systematic sample collection from five towns; but while Mr. Rowntree deals with completed families and traces their history since marriage, the five towns' inquiry gives only an instantaneous picture of the situation at one date.

The present writer obtained new figures from the Census Office after the 1911 Census, which, owing to the war, have so far not been published. The householders' schedules of Bristol, Newcastle-on-

[1] The volumes dealing with the number of children born to a marriage add no information on questions of this kind.

Tyne, Leeds, Bradford (Yorks), Bethnal Green, Shoreditch and Stepney were turned through by the Census clerks, and extracts were made from one householder's schedule in every fifty throughout these boroughs ; each extract showed the age and sex of every individual in a household, separating occupied from unoccupied, and the occupation of the householder, and in the case of married couples the husband and wife were shown by special marks. The precision of the results of such samples can be determined *a priori* by theory, and it was found that where comparison was possible with the published Census tables the results were satisfactory. The seven boroughs contain about 419,000 households, of which 8,400 were included in the sample. The whole population of these seven boroughs, together with those of Bolton, Northampton, Stanley (Durham), Warrington and Reading, the towns dealt with in *Livelihood and Poverty*, was nearly 1,900,000 in 1911. The population of all towns in England and Wales with more than 50,000 inhabitants was about 18,000,000 in 1911, and since the variation shown between the towns in our sample, as exhibited in the following tables, is considerable, due care must be exercised in making generalizations.

By means of the description of the occupation of the householder, the statement as to the number of rooms in the tenement, the presence of servants, and other slighter indications, a considerable number of the households in the seven boroughs were marked as middle-class and are eliminated from the investigation ; in the five towns similar households were more easily eliminated. The tables relate solely to working-class households. A line was also drawn between households where the principal occupied person was following a skilled trade and other households. A good deal would appear to turn on the definitions of " middle-class " and " skilled," and this consideration would be important if absolute numbers were used ; but for the purposes of the following tables, where only averages and relative numbers are in question, it is to a considerable extent indifferent over a broad margin where the divisions are made ; the differences shown, e.g., in the average numbers of children in the two classes, will be little affected by the transfer of a number of households from one class to the other.

A more serious difficulty is encountered in the absence of any statement of relationship (other than that of husband and wife) in the extracts from the Census. In the majority of cases there could be little doubt that those under 14 years were, in fact, dependent upon (even if they were not the children of) the householder whose occupation is named. In a minority of cases the question had to be decided by a comparison of ages and by the constitution of the family. In Tables VII and IX the tabulation simply shows the number of children in relation to the age of the principal householder; where there was a second male worker over 18 in the house he is credited with no dependent children. In the five towns, on the

other hand, we had complete knowledge of relationship, but insufficient information about the men's ages, so that they are not included in Tables VII to IX.

In the Census, of course, some persons are described as occupied, who are, in fact, permanently incapable of earning owing to age, accident or illness, and there was no means of eliminating them ; in the five towns, such persons were not counted as earners unless their illness or unemployment appeared to be of a temporary nature.

In general the tables are necessarily rough and the figures are approximate, but it is believed that the general proportions between the various numbers shown rest on a substantial basis, even though they ought not to be used for fine calculations. It is suggested that an enormous mass of important information might have been obtained from the Census, if more attention had been paid to the household instead of concentrating on the individual.

In Table I is shown the same kind of information as may be obtained from the Census publications, with the important differences that institutions, hotels, etc., are excluded, so that the number of persons per " occupier or separate family " is reduced from 4·5 to 4·2, and that middle-class families are excluded. We find that, in the twelve towns or boroughs which the investigation covers, 1·9 persons are occupied and 2·3 persons are dependent per household. From general statistics of wages we may estimate that the average weekly family income in these boroughs was, before the war, about 38s. 6d. a week or £100 a year, and that the earnings of the family averaged $1\frac{2}{5}$ the earnings of a man. The number of unoccupied boys and men over 14 years is very small and includes the incapable and superannuated.

TABLE I.—Working-class Households.

Number of occupied and unoccupied persons per household. Massed sample from twelve towns or boroughs.

EARNERS OR OCCUPIED.

Men and Boys.			Women and Girls.		Children.	
20 years and over.	18 to 20 years.	14 to 18 years.	16 years and over.	14 to 16 years.	Under 14 years.	Total.
1·074	·078	·150	·520	·052	·031	1·905

NON-EARNERS OR UNOCCUPIED.

Men and Boys.		Women and Girls.		Children.		
18 years and over.	14 to 18 years.	16 years and over.	14 to 16 years.	5 to 14 years.	Under 5 years.	Total.
·082	·014	·857	·022	·837	·507	2·319

All in Household : 4·224.

All tenements in urban districts in England and Wales. Number of occupied and unoccupied persons per tenement.

OCCUPIED.

Men and Boys.			Women and Girls.		Children.	
20 years and over.	18 to 20 years.	14 to 18 years.	16 years and over.	14 to 16 years.	Under 14 years.	Total.
1·201	·078	·136	·596	·043	·019	2·073

UNOCCUPIED.

Men and Boys.		Women and Girls.		Children		
18 years and over.	14 to 18 years.	16 years and over.	14 to 16 years.	5 to 14 years.	Under 5 years.	Total.
·078	·028	1·026	·042	·790	·486	2·450

All in Tenement: 4·524.

A more detailed analysis has been made in respect of the unoccupied women and girls in the same towns, excluding Bolton and Stanley; in these ten towns there are, per 1,000 households, 842 women or girls over 16 years of age without definite occupation, except in household work, who may be classified as follows:

Unoccupied women per 1,000 households.

A.—Where there are children under 14 years:

Wives	... 459	
Other women apparently in charge of children	... 30	
		489

B.—Where there are no children under 14 years:

Ages.	Wives.	Others.	Total.	
16- ...	11	31	... ...	42
25- ...	71	25	... ...	96
45- ...	109	46	... ...	155
65- ...	16	44	... ...	60
	207	146		353
			A. and B. ...	842

The number of unoccupied unmarried women is very small, and even among the wives there are few who have no children under 14 and who are unoccupied. The popular idea that there was a large reserve of women who were drawn into industry during the war is erroneous.

Table II shows in more summary form similar details for the towns separately. The average household is smallest in Bradford, where children are scarce, and largest in Warrington and Stanley, where there are more children and also more men and boys occupied. In Newcastle, Warrington and Stanley (a coal district) the number

of unoccupied women is above the average ; in Bradford the number of occupied women is a maximum. The differences between the towns, related of course to their industries, are very interesting.

TABLE II.—Numbers of Occupied and Unoccupied Persons per Household.

	Working-class families, from *sample.*						All tenements, from *Census Volume.*
	Occupied (over 14 years.)		Unoccupied (over 14 years.)		Children under 14 years.	Total.	Total.
	Males.	Females.	Males.	Females.			
Bethnal Green, Shoreditch, Stepney	1·21	·57	·03	·77	1·52	4·11	4·74
Bristol ...	1·25	·53	·05	·92	1·41	4·16	4·45
Newcastle ...	1·37	·37	·06	1·12	1·58	4·50	4·80
Leeds	1·37	·58	·03	·90	1·33	4·21	4·35
Bradford ...	1·26	·72	·02	·80	·97	3·77	4·03
Bolton ...	1·21	·61	·08	·94	1·11	3·95	4·45
Warrington ...	1·49	·40	·07	1·08	1·79	4·83	5·08
Northampton...	1·44	·58	·10	·95	1·23	4·30	4·59
Reading ...	1·31	·42	·10	·93	1·54	4·30	4·44
Stanley ...	1·54	·07	·14	1·29	1·76	4·80	5·02

Table III shows the same figures from another point of view ; in it the individuals are subdivided per 1,000 persons, no longer with

TABLE III.—Classification of Persons in Working-class Families by sex and age into earners and non-earners.
Per 1,000 *persons.*

	Men over 18 years.			Lads, 14-18 years.		Women over 16 yrs.		Girls, 14-16 years.		Children 5-14 years.		Children under 5.	Totals.	
	Earners over 20.	Earners, 18-20.	Non-earners.	Earners.	Non-earners.	Earners.	Non-earners.	Earners.	Non-earners.	Earners.	Non-earners.		Earners.	Non-earners.
Bethnal Gn., Shoreditch, Stepney	247	16	3	35	5	126	179	13	6	1	229	140	438	562
Bristol ...	253	15	6	32	5	116	214	12	7	1	215	124	429	571
Newcastle ...	258	17	8	30	6	76	236	6	12	3	207	141	390	610
Leeds ...	267	20	5	38	2	123	210	15	5	13	186	116	476	524
Bradford ...	283	17	4	36	1	170	212	18	2	27	142	88	551	449
Bolton ...	256	17	18	34	3	137	232	18	2	19	170	94	481	519
Warrington...	258	16	14	35	1	69	219	14	4	5	238	127	397	603
Northampton	270	23	20	41	3	122	217	13	5	2	191	93	471	529
Reading ...	253	15	19	36	4	84	214	13	3	1	233	125	402	598
Stanley ...	266	21	23	34	6	15	248	1	20	—	220	146	337	663
Weighted av.	254	19	20	36	3	123	203	12	5	7	198	120	451	549
All persons, working-class or not, in urban districts (England and Wales).	265	17	17	30	6	133	227	9	9	4	175	108	458	542

reference to families. Thus, in the three metropolitan boroughs, of 1,000 persons in the working-class 438 are occupied, 562 unoccupied; of the occupied, 247 are men over 20 and 126 women over 16; 370 are children under 14 years. In the last line are shown comparative figures for all persons in all urban districts; here 458 per 1,000 are occupied, slightly more than in the aggregate of the selected towns (451); the difference is due to the inclusion of occupied persons not living in families. The middle-class, so far as our extracts go, have fewer children, fewer occupied persons and more unoccupied adults; in all, 430 occupied to 570 unoccupied, of whom 230 are under 14 years.

When the working-class is divided into skilled and unskilled (in the seven boroughs for which details were extracted from the Census) no great differences are found between them. Per 1,000 persons, there are 322 children under 14 (seven of whom are occupied) in the skilled group, and 338 children (nine occupied) in the unskilled; of the women over 16, 36 per cent. are occupied in the skilled group and 39 per cent. in the unskilled. Further detail is shown in Tables V and VI.

We come to closer quarters with the problem of earners and dependants in the classification in Tables IV, V, VI. In Table IV, in the twelve towns together, we find 41 households per 100 which depend on one man earner (over 20 years); in 28 per 100 he is helped by children; and in 8½ per 100 by his wife (and in some

TABLE IV.—Working-class Households classified according to earning strength.

Per 100 *households in each town.*

	EARNERS.						
	One man over 20.	One man and one or more children.	Man and wife with or without earning children.	Other cases including a man.	No man earner.	No earners.	Total.
	HOUSEHOLDS.						
Bethnal Green	42	21	16	9	11	1	100
Shoreditch ...	37	22	13	10	14	4	100
Stepney ...	49	22	6	8	13	2	100
Bristol ...	44	27	6	10	9	4	100
Newcastle ...	51	26	3	13	6	1	100
Leeds	39	31	8	12	8	2	100
Bradford ...	33	31	12	11	11	2	100
Bolton ...	39	29	6	10½	12½	3	100
Warrington ...	48	28	3½	13	4½	3	100
Northampton...	[illegible]	32½	6	11½	6½	3½	100
Reading ...	48	26½	6	6½	7½	5½	100
Stanley ...	60	21	½	8½	4	6	100
Weighted Av'ge	41	28	8½	11	9	2½	100

In obtaining the weighted average the towns were assigned weights proportional to the estimated numbers of working-class households in them.

cases also by children); in 11 households there are groups of workers, including a man, not easily classified, such as two brothers, a brother and sister, etc.; in 9 per 100 there are only women and children. The variation from town to town is considerable. The details are given for Reading, Northampton, Warrington and Stanley for every family separately in the Appendix of *Livelihood and Poverty.*

TABLE V.—WORKING-CLASS HOUSEHOLDS CLASSIFIED ACCORDING TO EARNING STRENGTH AND TO NUMBER OF DEPENDANTS IN TEN TOWNS MASSED TOGETHER.

Per 1,000 *households.* SKILLED *householders.*

Dependants. Under 14 years.	Dependants. Over 14 years.	EARNERS. *Man*[1] and earning children. 0	1	2	3 or more	*Man and Wife* and earning children. 0	1	2	3 or more	*Miscellaneous including one man.* Earners. 1	2	3	*No Man.* One Woman. Woman & children.	*No Adult.* Earners. 1	2	3	Totals.
		NUMBER OF HOUSEHOLDS.															
0	0	0	7	3	3	17	7	3	3	20	6	7	16	14	—	—	—	106
	1	102	38	23	26	1	1	—	—	13	17	13	7	6	6	3	2	258
	2 or more	15	7	5	5	—	—	—	—	3	4	6	—	1	2	1	—	49
	Totals	117	52	31	34	18	8	3	3	36	27	26	23	21	8	4	2	413
1	0	1	1	1	1	11	2	2	—	—	1	1	4	5	—	—	—	30
	1	96	15	13	15	2	1	—	—	—	5	7	2	—	1	—	2	159
	2 or more	7	6	5	5	—	—	—	—	1	2	3	—	—	—	1	—	30
	Totals	104	22	19	21	13	3	2	—	1	8	11	6	5	1	1	2	219
2	0	1	—	—	1	6	2	1	1	—	1	1	2	1	—	—	—	17
	1	80	13	10	12	1	1	—	—	—	4	4	1	—	1	—	—	127
	2 or more	7	3	4	3	—	—	—	—	—	—	1	—	—	—	—	—	18
	Totals	88	16	14	16	7	3	1	1	—	5	6	3	1	1	—	—	162
3	0	—	—	—	—	4	—	—	—	—	—	—	1	—	—	—	—	5
	1	56	7	5	5	—	—	—	—	—	5	2	—	—	—	—	—	80
	2 or more	5	3	2	2	1	—	—	—	—	1	1	—	—	—	—	—	15
	Totals	61	10	7	7	5	—	—	—	—	6	3	1	—	—	—	—	100
4	0	—	1	—	—	1	1	—	—	—	—	—	—	—	—	—	—	3
	1	32	7	6	5	—	—	—	—	—	1	1	—	—	—	—	—	52
	2 or more	4	3	2	1	—	—	—	—	—	—	—	—	—	—	—	—	10
	Totals	36	11	8	6	1	1	—	—	—	1	1	—	—	—	—	—	65
5 or more	0	—	—	—	1	1	1	—	—	—	—	—	—	—	—	—	—	3
	1	24	3	3	—	—	—	1	—	—	1	1	—	—	—	—	—	33
	2 or more	3	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	5
	Totals	27	4	4	1	1	1	1	—	—	1	1	—	—	—	—	—	41
Totals	0	2	9	4	6	40	13	6	4	20	8	9	23	20	—	—	—	164
	1	390	83	60	63	4	3	1	—	13	33	28	10	6	8	3	4	709
	2 or more	41	23	19	16	1	—	—	—	4	7	11	—	1	2	2	—	127
	Totals	433	115	83	85	45	16	7	4	37	48	48	33	27	10	5	4	1000

[1] In this table the age 20 years is taken as dividing men from lads.

Tables V and VI are the most important ones in this analysis, giving as they do information of a kind never before published on a large scale, so far as is known. Here the households are classified according both to the earning group and to the dependants. Minimum wages are commonly based on the idea that a man has to support unaided a wife and three children under 14 years, and no one else. A family so constituted only occurs in 56 households per 1,000 in the skilled group, in 52 in the unskilled. The commonest

case in the classification is that of man and wife with no dependants; this group accounts for about one-tenth of all the households. There are no dependent children, though there are children at work, or an unoccupied adult, or a second adult worker, in other cases, and in all the households with no dependent children under 14 years account for 415 per 1,000.

The average number of dependent children under 14 years is 1·32 in the skilled group, 1·40 in the unskilled. A number of other minor differences can be observed between the two groups.

TABLE VI.—Working-class Households classified according to earning strength and to number of dependants in ten towns massed together.

Per 1,000 *households.* Unskilled *householders.*

Dependants. Under 14 years	Dependants. Over 14 years	EARNERS. *Man*[1] and earning children. 0	1	2	3 or more	*Man and Wife* and earning children. 0	1	2	3 or more	*Miscellaneous including one man.* Earners. 1	2	3	*No Man.* One Woman, Woman & children.	*No Adult.* Earners. 1	2	3	Totals.
		NUMBER OF HOUSEHOLDS.															
0	0	—	5	2	3	29	5	4	2	19	6	9	31	18	—	—	—	133
	1	99	36	27	20	1	1	—	—	13	14	16	5	2	6	3	4	247
	2 or more	8	6	4	3	—	—	—	—	3	3	4	2	—	3	1	—	37
	Totals	107	47	33	26	30	6	4	2	35	23	29	38	20	9	4	4	417
1	0	1	—	1	1	14	3	1	1	—	1	2	6	6	—	—	—	37
	1	81	18	12	14	3	1	1	—	—	4	5	2	1	1	1	1	145
	2 or more	4	4	4	4	—	—	—	—	1	2	2	—	—	—	—	—	21
	Totals	86	22	17	19	17	4	2	1	1	7	9	8	7	1	1	1	203
2	0	—	—	—	—	14	1	1	1	—	—	1	2	3	—	—	—	23
	1	72	12	11	8	2	1	—	—	1	3	2	1	—	1	1	1	116
	2 or more	4	1	2	1	—	—	—	—	—	1	2	—	—	—	—	—	11
	Totals	76	13	13	9	16	2	1	1	1	4	5	3	3	1	1	1	150
3	0	1	1	—	—	5	1	—	1	—	—	1	1	2	1	—	—	14
	1	52	8	6	8	—	—	—	—	1	1	1	1	—	—	1	—	79
	2 or more	6	3	1	1	—	—	—	—	—	1	—	—	—	—	—	1	13
	Totals	59	12	7	9	5	1	—	1	1	2	2	2	2	1	1	1	106
4	0	—	—	—	—	2	—	—	1	—	—	—	1	1	—	—	—	5
	1	32	10	4	6	1	—	—	—	—	1	1	—	—	—	—	—	55
	2 or more	2	2	1	—	—	—	—	—	—	—	—	—	—	—	—	—	5
	Totals	34	12	5	6	3	—	—	1	—	1	1	1	1	—	—	—	65
5 or more	0	—	—	—	—	2	1	1	—	—	—	—	1	—	—	—	—	5
	1	28	9	5	2	—	—	—	—	—	1	3	—	—	—	—	—	48
	2 or more	4	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	6
	Totals	32	10	6	2	2	1	1	—	—	1	3	1	—	—	—	—	59
Totals	0	2	6	3	4	66	11	7	6	19	7	13	42	30	1	—	—	217
	1	364	93	65	58	7	3	1	—	15	24	28	9	3	8	6	6	690
	2 or more	28	17	13	9	—	—	—	—	4	7	8	2	—	3	1	1	93
	Totals	394	116	81	71	73	14	8	6	38	38	49	53	33	12	7	7	1000

[1] In this table the age 20 years is taken as dividing men from lads.

A useful way of grasping the significance of the tables is as follows: Let us assume that the only person over 14 properly dependent on the man is his wife,[1] and also that the father is solely

[1] The inclusion of children from 14 to 16 years as dependent would make little difference to the figures. If the man is a widower, one other adult is substituted in the estimate.

responsible for the support of all children under 14, and that a wage is fixed adequate for a man, wife and three children. Eliminate the columns where no man is working, the cases of broken families, 9 or 10 per cent. of all. Then in the remaining families the wage would be exactly adequate in only 11 per cent. of the households; it would be inadequate in 13 per cent., and would allow a margin in 76 per cent. If the intention of the wage was to divide a total available fund in proportion to needs, the method in question would be both inadequate and wasteful.

Mr. Rowntree (*Human Needs of Labour*, p. 33) approaches the question from a different standpoint. He does not regard the question as one of the position at a particular date (as in the tables before us), but from the point of a view of family history: a man, soon after marriage, has commonly one child to support; as time goes on he has more children and his responsibility increases till the first child goes to work. Mr. Rowntree finds that 50 per cent. of married men have, at one time or another in their lives, three or more children to support, and that a wage which allowed the adequate support of only three children would be inadequate for a short or long period in 33 per cent. of the households. He, of course, acknowledges that the wage would be more than adequate before the third child arrived, and after all but two were at work, but points out that in the earlier period money is needed to establish the household and in the latter period for providing for old age. His estimate is quite consistent with the figures given here.

Some new light is thrown on the subject by Tables VII, VIII and IX, in which an attempt is made to show how the responsibility for the support of children varies with age. All working-class men over 18 enumerated in the samples are included, whether married or single, heads of a household or not; and all unoccupied children under 14 years in households in which there was any man over 18 are included. In general there was no difficulty in assigning the responsibility for support, for the ordinary case is that of the married householder obviously the father of the children concerned; but in some cases the children seemed to be dependent on a grandfather, uncle, or elder brother, and a little guesswork, which can have no important effect on the results, had to be used.

Table VII is necessarily a little complicated. In all there were 7,716 men and 8,656 children. Of the men 4,096 (bachelors or married), 53 per cent. of all, had no children under 14 years; 1,247 (16 per cent.) had one child, and so on. The number of children per 100 men of all ages was 112. Among 1,029 men in the age-group 20 to 25 years, 888 had no children, 94 had one child, and so on; the number of children to this group is then 199 ($94 + 37 \times 2 + 9 \times 3 + 1 \times 4$), which amounts to 19 per 100 men in the group. The figures in the last column are the important ones; the responsibility increases with age from 12 per 100 men between 18 and 20 years to 222 per 100 men between 35 and 40; by interpolation the

TABLE VII.—Number of Dependent Children and Age of Workmen in seven boroughs combined.

Age of Man.	All Men.	No. of children under 14 apparently dependent. 0	1	2	3	4	5	6	7	8	All Children. Actual No.	Per 100 men.
		Number of Men.										
18–	487	461	9	6	6	4	1	—	—	—	60	12
20–	1029	888	94	37	9	1	—	—	—	—	199	19
25–	1088	555	232	175	94	27	4	1	—	—	998	92
30–	1074	334	218	195	164	92	44	19	7	1	1859	173
35–	1008	243	157	189	165	124	86	30	9	5[1]	2240	222
40–	781	235	149	138	92	83	51	20	11	2	1501	192
45–	706	261	146	127	71	68	25	7	1	—	1059	189
50–	559	307	128	67	33	15	4	5	—	—	471	84
55–	410	317	60	17	7	7	1	—	1	—	155	38
60–	482	413	46	16	6	1	—	—	—	—	100	21
70–	92	82	8	1	—	1	—	—	—	—	14	15
All Ages	7716	4096	1247	968	647	423	216	82	29	8[1]	8656	—
Per 100 Families	100	53·1	16·2	12·5	8·4	5·5	2·8	1·0	·4	·1	—	112

[1] One case of 9 children.

age of maximum responsibility is 38 years. After this age the children begin to go to work in increasing numbers and the responsibility falls till for men between 55 and 60 years it is 38 per 100; in the oldest groups it is possible that the children were dependent on mothers or sisters, and not on grandparents.

TABLE VIII.—Number of Dependent Children and Age of Workman.
Average Number of Children under 14 years per 100 workmen.

	Age of Workman. 18–	20–	25–	30–	35–	40–	45–	50–	55–	60–	70–	All ages
Bethnal Green ...	13	22	115	209	293	270	146	91	15	12	40	135
Shoreditch	12	30	116	171	260	261	183	82	40	44	50	125
Stepney	10	27	105	233	290	231	138	77	29	39	8	135
Bristol	1	19	87	174	235	201	169	115	51	13	25	119
Newcastle-on-Tyne	33	18	99	183	224	214	161	108	61	32	0	124
Leeds	12	17	86	158	202	168	160	66	35	98	9	102
Bradford	6	13	68	106	146	112	102	71	30	14	13	76
Northampton ...	—	0	47	148	204	145	175	76		74		98[1]
Together	12	19	92	173	222	192	189	84	38	21	15	112

[1] Only men above 20 tabulated for Northampton.

In Table VIII the figures corresponding to this last column of Table VII are shown separately for each borough, and the differences between them are very striking. In East London and in Newcastle the numbers are high; in Bradford, very low. In every case, however, the maximum responsibility is at the age-group 35 to 40 and nearer 40 than 35 (at Shoreditch it is at 40).

In a rational system of wages, in which they increased with needs, there would be increments with age and service up to the age of 40 years; and in a rational organization of training and work a man would be progressively worth more as he approached the prime of life. As it is, the majority of men who have energy and a sense of responsibility can earn more after 35 than before 25 years. The suggestion from the tables is that the minimum wage for men over 20 should allow for the support of one child, and that every industry should be organized so that promotion to higher grades of wages should come in the ordinary course to all capable men in the first ten years of work.

In Table IX the distribution of households according to the number of children and irrespective of age, summarized at the bottom of Table VII, is shown for each borough separately. In every borough the numbers descend regularly from the category no children under 14 years (three-fifths of all in Bradford) through successive categories.

TABLE IX.—Workmen classifed according to the number of Children dependent on them.

	Number of Dependent Children under 14 years.									Total
	0	1	2	3	4	5	6	7	8 or more	
	Relative Number of Men.									
Bethnal Green ...	479	148	126	117	76	33	14	5	2	1000
Shoreditch ...	508	155	133	82	67	22	27	4	2	1000
Stepney	499	140	123	95	78	40	16	7	2	1000
Bristol	516	157	134	85	57	31	12	5	3	1000
Newcastle ...	513	154	114	92	70	42	12	3	—	1000
Leeds	541	173	134	75	44	25	5	3	—	1000
Bradford ...	606	182	113	64	22	8	4	1	—	1000
Total ...	531	162	125	84	55	28	10	4	1	1000

FURTHER NOTE ON "DEPENDANTS ON WOMEN WAGE EARNERS."

(See *Economica*, No. 1, p. 77.)

Since the publication of the first number of *Economica*, the results of the investigation by Mr. B. Seebohm Rowntree and Mr. Frank D. Stuart have been issued in a book entitled *The Responsibility of Women Workers for Dependants* (Clarendon Press). The tables in it are based on particulars for 13,637 women workers, the cases being taken from eleven towns, and owing to the large number of cases and the detailed information about each, the authors have been able to compile very interesting tables giving for women in eight age-groups the percentage having dependants, and to give with greater particularity than has before been attained the relative prevalence of various causes of women's responsibility.

The resulting figures differ from those of the investigation described in *Economica*, much as did those of the smaller inquiry described in *The Human Needs of Labour*, and as with the latter, the unlikeness to ours is so great as to call for some consideration. Reference to the data shows that a change in the age limit for women earners from 16 to 18 years only affects the proportions in our tables very slightly indeed, and as we may regard the data in each inquiry as representative of the situation where they were collected, the possible reasons left for the discrepancy are a difference of conditions in the towns chosen, in the date of the investigation, and in the principles guiding the tabulation. Of these, the difference between the collections of towns is not likely to be very great, and while between 1914 and 1919 the distribution of earners and non-earners by sex and age has undoubtedly altered, the definitions and the methods of tabulation employed would yet appear to be the chief cause of divergence. Mr. Rowntree's investigators ascertained whether women were in receipt of earnings which made it possible to help those for whom they were responsible ; in the " general " classification in *Economica* the question was simply whether they had responsibility, not whether they could meet it. Mr. Rowntree finds 1,180 dependants on 13,637 workers, i.e., 8 per 100 ; Miss Hogg, in *Economica*, found about 20 per 100. On the other hand, Mr. Rowntree (p. 17) finds that of the working women concerning whom information was obtained, 12 per cent. " wholly or partially supported others " ; Miss Hogg arrives equally (p. 85) at 12 per cent. in the general classification as having partial or total responsibility ; in the " particular " classification for five towns, which one would expect to be closer to Mr. Rowntree's, the relative number having partial responsibility is considerably greater. Students of this problem will find it necessary to analyse minutely the methods employed, which are fully described in both the originals.

The Survival of Small Firms

By A. L. Bowley,

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A very considerable amount of new information relating to the structure and organization of business and industry was collected by the Government Departments during the war, a great part of which served its immediate purpose and has either not been preserved or will never be analysed nor published. It is the object of this note to rescue a bye-product of the work of a semi-official committee that investigated the first effect of the war on unemployment in London.

In August, 1914, inquiries were made of employers as to the number of persons (male or female) employed in July and in August. Three lists of businesses were used, as follows: The Board of Trade, in connection with the Census of Production then in progress, had a list of all firms (about 1,700) known to be employing 100 or more persons (50 or more in the building trade), and answers were received from nearly 1,000 of these. The Home Office had an index of about 42,000 factories and workshops, and questionnaires were sent to a great number of these selected at random, and about 3,300 were returned. A committee in the city obtained similar information from about 1,300 firms. The whole inquiry was initiated, organized and carried out with great rapidity, and the first report on unemployment was issued exactly four weeks after the declaration of war.

An examination of the returns shows that approximately 5,500 firms, employing 340,000 persons, had sent reports. Those from the city related principally to banking, insurance, brokers, dealers, shopkeepers and commercial houses generally; the results in these groups are shown separately in Table I. The Home Office list related mainly to firms employing less than 100 persons, and was, therefore, supplementary to the Board of Trade's list. After careful scrutiny it was estimated that for small firms (employing less than 100) the sample averaged 1 in 10, and for large firms 2 in 3 of all persons employed in London (1,100,000) in the very wide range of occupations included. Before calculating the relative numbers for the table the numbers for the small firms were multiplied by 10, and for the large firms by one and a half, to rectify the inequalities of the samples; these factors are only approximately correct, and the table shows more accurately the distribution within the two groups obtained by dividing it at 100 employees, than in the mass taken as one group. Even when allowance is made for this roughness the results are striking; 72 per cent. of the persons work for firms

TABLE I.

Number of Persons employed per firm.	Relative Number of Firms. Banking, Commerce and Dealing.		Industry.		Approximate Percentage of all Persons employed.
1	70		42		
2	83		75		
3	95		76		
4	83		65		
5	57		55		
6	55		47		
7	44		34		
8	28		39		
9	34		25		
1 to 9	——	549	——	458	8
10	26		25		
11	20		27		
12	22		25		
13	19		21		
14	21		14		
15	21		18		
16	12		14		
17	21		13		
18	14		17		
19	11		17		
10 to 19	——	187	——	191	11
20	13		12		
21	13		9		
22	16		11		
23	9		11		
24	7		10		
25	7		9		
26	11		9		
27	5		9		
28	4		7		
29	9		7		
20 to 29	——	94	——	94	9
30 ,, 39		55		62	8
40 ,, 49		29		46	7
50 ,, 99		74		120	29
100 ,, 149		4		9	4
150 ,, 199		2		6	3
200 ,, 299		2		6	4
300 ,, 399		1		2	3
400 ,, 499		1		2	2
500 ,, 999		1		2	5
1000 and over		1		1	7
Total ...		1,000		1,000	100

who employ less than 100 ; 988 out of 1,000 of the commercial and 972 out of 1,000 of the industrial firms (each firm taken as a unit) employ less than 100. More than half the firms employ less than 20 persons, and this statement is not affected by the roughness of the approximation.

In Table II the number of firms is shown for certain industries following the Census classification ; here no adjustment has been made for the inequality of the samples. Each category covers, in fact, a fairly wide range of separate kinds of manufacture.

The Board of Trade has collected similar information for the country as a whole continually for more than six years, for the purpose of studying changes in employment, but so far has made no systematic publication of the results. It is to be wished that they should issue tables for the various industries similar to those here offered for London.

TABLE II.—Actual Number of Firms reported in certain Industries.

	Employing less than 20.	20 to 49.	50 or more.
Commerce—			
Banking, insurance, stock-brokers, etc.	122	62	59
Dealers, shopkeepers, agents and brokers	1089	229	193
Industry—			
General engineering	79	40	52
Other metal trades	94	35	64
Electrical apparatus	28	5	19
Cycles and motors	22	14	13
Precious metals and jewellery	47	9	10
Watchmakers	16	2	3
Piano makers	8	7	11
Other instruments, games ...	44	23	23
Building	72	64	82
Cabinet makers, upholsterers	115	26	19
Manufacturing chemists ...	24	11	30
Paints, soap, rubber, etc. ...	36	25	52
Furs and skins	41	19	3
Leather and leather goods ...	58	23	21
Paper and stationery ...	59	21	74
Printing, bookbinding ...	178	57	133
Tailors	288	40	29
Dressmakers	123	33	32
Boot and shoe makers... ...	80	6	15
Milliners	33	10	9
Seamstresses, shirt makers ...	38	16	33
Bread, biscuits, cakes... ...	128	18	12
Jams, preserves and sweets ...	6	3	22
Tobacco manufacturers ...	9	6	15
All other industries	586	176	270

Note.—Owing to the inequality of the samples, the numbers in the last column should be reduced (by dividing by various unknown factors whose average is 6) to make it comparable with the earlier columns.

Foundations of Industrial Welfare

By Miss E. T. Kelly and Miss M. L. Haskins,
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Few more difficult tasks have been set for men than the one which is now confronting the practical business man and employer on the one side and the vast army of workers who are employed on the other. The task involves an answer to the question: What *is* wrong with industry? And in the efforts which have been made to find a solution to the problem emphasis has been laid, sometimes on the need of change or modification in the structure and sometimes on the need of a change in the spirit.

These efforts have come from every grade of those connected with industry, and are concerned with different standpoints—all of them containing elements of value, and in the contribution of which the Trade Unions, the Employers, and the Government have all played their part. The vast system of bargaining established through persistent and bitter struggle by the Trade Unions, the factory legislation of the past hundred years, the introduction of Trade Boards by the Government, of Whitley Councils and of co-partnership schemes by employers, have all been attempts to counteract some of the evil results of the mal-adjustment which was bound up with the development of large-scale production. In recent years a new note has been heard in connection with efforts which have been made—a note showing a deeper understanding of the vital issues concerned, which reveals a growing perception, not only for the need to right specific wrongs, but for a keener sense of the place of human life in industry and for a deeper fundamental justice.

The classic definition of the factors of production as land, capital, and labour was illustrated by the simile of three balls in a basin, mutually interdependent for their position and stability. This illustration was true as long as industry was organized on a small scale, and one man controlled the capital and provided some at least of the labour in his own person. But its reliability becomes less and less as the complexity of industrial organization increases, and we approach the huge concern of modern times where the owner of the capital involved is not one man, but a company of men who are often entirely ignorant of even the method of production and whose interest is limited to a study of the annual balance sheet, while the control of the processes and conditions of production is apt to be entirely in the hands of the salaried management. The organizers of modern large-scale production have gradually drifted

so far out of touch with the men and women who are their partners in production that it is true of many businesses to-day that employers and employed are working with entirely different objects in view, and that neither side would understand the position were the other to approach it with suggestions for real co-operation. Examples could be given of large firms where the head of the firm is unknown even by sight to men who have worked in the firm for fifteen or twenty years. " Labour " is too often regarded as a purchasable commodity rather than as the contribution made by a free partner to the common effort. This attitude is not by any means universal among employers, but has been sufficiently common to have produced a very general acquiescence among the public, and even to a large extent among the workers themselves.

The position has been further complicated by the fact that simultaneously with this degradation of the workman as a producer has come his enfranchisement as a citizen, so that while industrially he has been deprived of all initiative, he has become a responsible member of the body politic. On the one hand he has been regarded as a " source of power "—and this applies to routine brain workers equally with the manual workers—while on the other he is accepted as a man.

This economic degradation is not due entirely to the wage system, but is to some extent a result of large-scale production which entails large groups of people working on more or less routine processes under direction. The mere substitution of a different method of payment and of direction by elected representatives rather than by the managerial class as at present, would not entirely obviate the need, which seems to be inherent in the more complex stages of organization, for some mechanism to secure the constant sense of unity between the hands and the head which is automatic where, as in the elementary stages, only one personality is involved.

Some employers have already recognized the necessity for some kind of specialized machinery which shall give as careful attention to the relationships between man and man in the works as is normally given to the adjustment and working of machinery or to the organization of processes and methods of work. The necessity for some distinctive department at the present moment is made imperative in a large works

1. By the limited time of a manager of works and the many calls made upon his energy and attention.

2. By the increasing importance which is admittedly attached to the selection of the worker and his subsequent place in the factory.

3. By the fact that in the growing complexity and size of modern industry that close touch of the management with the men which is essential to mutual understanding is inevitably lost unless it is the primary concern of some department within the industry itself to guard and promote it.

It may be well to outline in brief detail the reasons which urge this necessity in reference to the above points.

1. The fact that there are limits both to the time and energy of a manager of works is one not always given its due weight by those who have criticized some omissions in the past ; but this point of view has to be carefully considered both by the critics and by the manager himself. For the successful working of even a moderately sized business, problem after problem has to be dealt with during the day in connection with every department under his care. As regards questions of detailed organization, methods of work, and problems of output, managers and their foremen must take the burden of responsibility, but none of these have usually the leisure to specialize concerning the life of the worker.

Furthermore, as the organization of industry becomes more and more complex so do the legal enactments and regulations, necessary to safeguard the well-being of all concerned, increase. For the carrying out of the various provisions of the factory, shops, trade boards, compensation, insurance, and now even of the education Acts, some machinery is necessary other than the ordinary works manager's office provides.

2. The question of the selection of the worker alone is one which is increasingly recognized as demanding much more time and personal attention than it has received in the past. Much of the tragedy in the life of the worker has been connected with the casual way of entering the factory which has been in vogue, and the careless apportioning of the work when once engaged. For these individual tragedies—the large number of which is only too well known to those who come intimately in contact with the lives of the workers —no one particularly has been to blame. They have been largely the result of a gap in an organization whose foundations were laid in an age when the value of human life was held all too lightly. It has not hitherto been recognized that although the foreman is a specialist as far as the work is concerned, the one who selects the worker in the first instance must be a specialist where the worker is concerned, and that it is by the co-operation of such specialists that the happiest result is to be obtained.

3. This selection, however, is of course only the beginning of that personal contact on the part of the management with the workers, which has been lost in modern large-scale production and which it is so essential to regain. Some employers have already done much towards the development of a department which makes the establishment of personal and harmonious relationships—and all the practical issues which that involves—one of its chief concerns. *How much that will eventually involve* is a thing which cannot be foreseen. If and when there is a real intention to get beyond the forms of fellowship and goodwill into the more fundamental realities of understanding and sympathy, such efforts may lead to very radical modifications in the structure of industry itself.

Here, then, are functions which need for their fulfilment an agency which is part of the industrial scheme, and yet not directly concerned with production. It is these functions which, after many experiments, Welfare Work claims as its own. It should be mentioned here that the term Welfare Work is used for convenience, that being the most common word in use to express the activities we are about to describe. We freely recognize that many examples of welfare work carried on under other names, and even disclaiming the title, are to be found.

Welfare Work had its origin in the minds of a few philanthropic employers. It is in some quarters suspect on that account, but it does not for that reason follow that it should be condemned. Rather it should be recognized that it is these same employers who have set the pace and have largely, by their experiments, made possible the general improvement in hours and conditions which legislation now makes compulsory for all. Like other movements, which have at length become more or less permanent institutions of society, it has developed in a piecemeal fashion, beginning in these tentative efforts on the part of individual employers and working its way toward a larger ideal. These early attempts on the part of men who were feeling after a different conception of the function of industry were the basis of a greater industrial change than they knew; they were the pioneers of a cause whose significance was not generally recognized by industry as a whole, and whose value had yet to be proved. It must be realized that welfare work to-day is a very different thing from that of twenty years ago. It has grown and altered out of all recognition. The first experiments were largely directed towards the improvement of the worker and had in them a big element of paternalism and benevolence. They had, indeed, much in common with the still earlier efforts of Robert Owen, who was really the original and isolated pioneer amongst employers in considering definitely the well-being of the worker in connection with his work. The early twentieth century employers fulfilled not merely the bare letter of the law enforced by factory legislation and the pressure of Trade Unions, but initiated changes in conditions which had most evidently not been adapted to the needs of human nature. But the significant change in the work itself may be summarized thus: In the old days the welfare worker tried to help the employer to make conditions good for the workers; now, the welfare worker merely smooths the path so that both employer and workers may together improve conditions for both.

This is not merely a verbal difference but a difference in principle which is fundamental. All honour to the pioneer employers who looked away from the bad old tradition and came to realize that the payment of the market price for labour did not discharge the whole of the debt owed by industry to this other factor in production. But

this feeling of responsibility led, in some cases, to the development of schemes of industrial betterment, which, often excellent in themselves, were of a very paternal nature, even approaching to a despotism strongly resented by its beneficiaries. On the other hand, the apparent similarity in activities led another type of employer to adopt the ideals of American enthusiasts for efficiency. In both cases the independent human personalities behind the " labour " in question were almost entirely ignored.

Many and varied experiments, conducted often with a very hazy conception of the end in view, were made during the first years of this century in many different industries, but always—or almost always—in firms of a family type where one or at most two men had a predominating influence on the Board of Directors and were, consequently, able to carry on such experiments often much in advance of general public opinion. These experiments were most valuable in exploring the possible improvements in the material surroundings of workpeople of many types and grades engaged in mass production. There was comparatively little interchange of experiences, and the literature describing the various experiments shows that the motives animating the employers concerned were mainly philanthropic or else had their origin in pride of business. There is very little trace at first of any consciousness of the desirability of allowing the workers to work out their own salvation, while the machinery available for the worker who wished to take an intelligent and constructive interest in his daily work was limited to more or less elaborate " suggestion " schemes.

It gradually became evident, however, that welfare work, to be effective and permanent, must be based not upon benevolent and philanthropic ideas on the part of the employer—although these may necessarily, in some cases, form the starting point. It must be based, rather, upon the co-operative effort of all concerned. If they were to pull their full weight in the industrial team it must be as men and women, not as machines. A ready-made scheme of welfare must not be introduced by the management and imposed upon the workers according to preconceived ideas of what was good for them —it must be a natural growth arising out of a sense of the inherent sense of the unity of interests which lies or should lie at the heart of all production, and which logically implies co-operation. With the emergence of this idea there came a marked change in welfare work. Progress was, perhaps, slower at first, but the scope was enlarged, and instead of being restricted largely to women and young persons, has come insensibly to embrace the whole of the industrial unit concerned. To estimate fairly its growth and rate of progress, it must be remembered that these ideas were contrary to the whole history of the capitalistic system as such. The employers and welfare workers who sought to put them into practice were working through an order of industry in which an autocratic government had been the rule for many decades, tempered only by

such modifications as the pressure of Trade Unions—chiefly in the direction of wages—and the rule of legislation—chiefly in the direction of hours and conditions—might bring. The idea that the life of the workers inside the factory might be a matter with which they themselves were intimately concerned and interested, and in the regulation of which they, as individuals, should at least have a voice, was one whose way was marked out by pioneers and was foreign to the thought of even many good employers who were quite willing to go a long distance, provided the control and initiation of these things came from the centre of power which was vested in the management. When a few employers, combining vision with practice, saw that more than this was needed, a further stage was reached in the history of the movement.

Thus, while welfare work had its origin in the attempt to carry out the benevolent ideas of the employer, and to meet the obvious physical needs of the workers, it now aims at something beyond the amendment of merely material conditions by the one for the many, and has become the first link in the chain of co-operative effort—a means whereby a dawning sense of the deeper needs of the people on the part of the employer, and an increasing desire for self-expression on the part of the workers, should meet, and in the meeting create a new ideal and spirit more in harmony with the general democratic tendency of the age. It does not, of course, claim to be the only, nor even the most important, remedy for the industrial diseases of to-day, but only that, by making easier everyday relations in the factory, by fostering the spirit of co-operation in the little things of life, it can pave the way for more ambitious schemes of reform. Thus, while the actual routine of welfare work has not much changed since the beginning, and though most of the day is still spent in supervising the detailed carrying out in spirit as well as in letter of the various Acts of Parliament dealing with industrial affairs, the modern welfare worker is animated by a spirit very different, though directly descended from, that which inspired the early pioneers—of co-operation rather than of assistance, of service rather than of guidance.

Legislation, since it cannot be far in advance of public opinion, is generally behind the most enlightened firms in its requirements. It is always pulling up the backward to the level of the medium, while the most advanced are making experiments, educating public opinion and preparing the way for still further legislation. In any case, however, the law cannot do more than provide the dry bones of welfare ; the spirit which is to give them life must come from the factories and workshops themselves, from the co-operation of employers and employed. Home Office Orders, for instance, can insist upon the provision of a place where meals can be taken, but only the spirit of good fellowship can convert " a suitable mess-room " into a place of real refreshment.

Consequently, welfare work will always imply more than the mere

carrying out of the letter of the law, though the letter of the law provides a very necessary framework round which the work can be built. The foundations of welfare work, however, must be firmly set on the acceptance of industry as a social service, shared by both capital and labour, in which every individual concerned has a part to play, not of necessity equal in importance, but equally essential to the end in view. Only when this foundation is secure can welfare work be said to exist at all, and this conception involves something very fundamental and far-reaching. It marks a real point of divergence from the conception of carrying out definite "schemes of welfare" laid down by the management—which was a comparatively simple and orthodox proceeding. It means approaching the subject with a real desire to overcome the increasing psychological problems in industry; the investigation of human standpoints; the discovery of causes of disharmony—and, by no means least, the definite encouragement of expression within the works (not merely outside), from the rank and file of industry itself. The silent have to become the articulate—and their articulateness has to be made effective within the borders of their industrial unit. If such a thing as co-operation in any true sense of the word is accepted as desirable, then this basic preparation has to come first. The standpoints of both capital and labour have to find some approximation, and the old fear and distrust—and their causes—have to be removed. It means a recognition on the part of the management of a principle whose aim is mutuality rather than dominance, and which requires, at the very outset, a keen appreciation of human needs and an examination of standpoints which have been considered as necessarily conflicting on the part of all concerned.

If the motive which turns an employer towards an idea of welfare work in his firm is that merely of making it another wheel in the machine of production and efficiency, and if this idea alone continues to animate him, the point which marks the divergence from that which we may call the superficial and the fundamental conception of welfare will never be reached. It will hold no truly progressive element, and will tend to become more and more mechanical. If, however, there is at heart a real desire to meet the human needs of labour, to consider man as man and not merely as a producing machine, then the deeper meaning which has become associated with the best and most modern developments of welfare work will have been reached, and elements of real progress will save its developments from being either coldly mechanical or authoritative and superficial.

An attempt, then, to carry out the spirit as well as the letter of welfare, both under the ægis of legislation and still more that of co-operation, must mark the beginnings of welfare work. Many improvements in the material surroundings quickly result, and almost simultaneously more or less elaborate works recreation schemes are mooted. This is a perfectly natural development,

for there is a tendency for people who are working together to like to play together also. It is, moreover, healthy, as it quickly affords an opportunity for the second stage of development, i.e., the development of committees and the practice of members in self-government. It is obvious that the second stage is a most important one in the history of any business. For the first time the employer willingly abdicates from his position as dictator, and though at first this may only be in the matter of recreation, it quickly affects the other side of life. The importance of this is only equalled by its difficulty. Both management and workers are exploring unknown territory and are liable to continual misunderstanding. Both are heirs to a mass of prejudice and suspicion inherited from a century of mismanagement. One of the most frequent sources of trouble is that, while the head of the firm may be perfectly sincere, and anxious to give the experiment a fair trial, his subordinates may not thoroughly understand or entirely agree with the principles involved, and until the whole management is at one on this matter, and prepared to discuss all points on their merits, and not only in the light of past history, the experiment has a poor chance of success. This is undoubtedly why we find that, almost invariably, a high standard of internal organization exists where good welfare work is carried on. Welfare work cannot live without good organization, and unless the latter is to become a hideous machine it must be tempered by that knowledge of and consideration for human nature which is in essence welfare work.

It is during the transition period that the welfare worker can do so much behind the scenes, by explanation very often, but still more often by merely interpreting one party to another. The setting up of a properly elected representative committee is the key to a new order of things in the everyday life of a business concern ; but it is a key which needs a considerable amount of oil if it is to turn easily in the lock of modern industry.

The committee, as has been said, may have its origin in some scheme of recreation, but it will take on other functions. Informally, if not formally, burning questions of domestic policy will be discussed at its meetings, and sooner or later it, or a similar body, will become recognized as competent to discuss the internal politics of the works. At this stage a properly drawn " constitution " is advisable, so that it may be clear to all what subjects are recognized as within its purview, and also that its relation with Trade Union organizations may be defined. The works which has advanced as far as this has laid a good foundation, but the building is yet to come, and its nature depends very largely on the honesty of purpose which animates both management and workers. It may be taken as axiomatic that no committee will do other than harm if either side has mental reservations. The management must be prepared to discuss, with an open mind, anything and everything which falls

within " the constitution," even if it appears to them a self-evident truth beyond dispute : " it always has been " is no reason for " it always will be." On the other hand, the workers must be willing to abide by the constitution even when it excludes from discussion the all-important topic of the hour. They must also learn to stand by their representatives not only in fair weather but in foul. Both sides, in short, will need all the patience and understanding they possess—and a good deal more. But given both sides are honest in the attempt, the committee will learn by its mistakes and work out its own salvation. Even though, especially at first, its deliberations are slow and often concerned with unimportant trifles, it will succeed in its main object—the building up of a better understanding between the management and the employee. It may be urged that the method is slow, and that meantime more important reforms wait, but these more important reforms have little chance of success while the atmosphere of distrust and suspicion prevails. The laying of good foundations is always slow and tedious work, but it is well worth doing. For many months, and even years, there will be much to discourage as well as much to hearten those members of the committee who see visions and who put their energies into the successful working of a holiday-savings fund, or a cricket club, not as an end but only as a means. But gradually they will realize that their work has been well and truly done, and that they are no longer building the foundations but the actual palace of their dreams.

It is probable that for many months the committee will be concerned mainly with a number of long-standing and often petty grievances of which the management has been in total ignorance, and which could have been remedied at once had they been mentioned. This stage is a very irritating one for those in authority, who feel quite naturally that all the paraphernalia of a committee is hardly necessary to remedy these minor troubles. This is intelligible, but the fact remains that without a committee they are never ventilated, but yet breed great discontent.

If the situation is handled carefully the grievances will gradually become suggestions, i.e., the committee, as it becomes articulate, will become constructive. It is important to emphasize the fact that the committee is impersonal in these matters—much bad feeling is thereby avoided, and its discussions are insensibly brought onto a higher plane. The management finds, by experience, that it is not subversive of good discipline to discuss fully with the committee the rules which must be kept by all, and the workers learn to appreciate some of the difficulties of the management. Gradually, as recurring elections bring new blood into the committee and send former members back into private life with a fresh outlook on affairs, the new spirit will spread through the works and a more complete understanding and mutual respect will grow. As the object of the committee's existence is the promotion of this spirit as well as the

good ordering of the body politic, it is wise to spread this interest as far as possible by giving special sub-committees charge of particular branches of work. In this way nearly all the activities commonly associated with welfare work can be supervised—dining-rooms, cloak-rooms, recreation and athletic clubs, educational classes, libraries, etc. The welfare worker acts, in this connection, as the executive officer of the committees ; the actual duties performed are much the same as they were ten years ago, but the background is very different.

It will be said that to make the scheme complete the executive officer of the committee should be one of themselves, or at least be appointed by them. The immediate practical difficulty in the way is, of course, the time involved. To act as secretary to such a committee is a full-time occupation if the duties are to be performed adequately and, *ex hypothesi*, the members of the committee are already fully occupied. That the secretary should be appointed by the committee is a perfectly logical outcome, and will be the custom in a few years' time. At present the committee generally owes its existence to an already appointed welfare worker who naturally becomes its first secretary. Several instances of the welfare worker being approved by the works committee before appointment by the firm have occurred recently in factories where such a committee had already been established, and the tendency will undoubtedly be, in the future, that this should happen as a matter of course. It may still be objected that the fact that the welfare worker is paid by the employer prevents his acting independently, and will inevitably bias his judgment in disputed cases. There is some truth in this objection, though in practice the difficulty is not so great as it appears on paper, and becomes less the more thoroughly the welfare work is organized under committees as described. The difficulty, however, exists, and will only be entirely overcome when the next stage of development which is already foreshadowed is reached, and the joint works committee becomes possessed of an income and is able to pay as well as appoint its own secretary. This may seem to some an idle dream, but already recreation committees are in existence which have independent banking accounts, and which run athletic clubs, dances, whist drives, and other social functions on business-like lines, devoting the " profits " to various objects, sometimes to charities, sometimes to the encouragement of new clubs or classes among their own members.

Is it too much to dream that before long some firms will take the next step and assign as income to their works committee a definite percentage (however small) of the profits, with which the committee could finance such schemes as it approved—for example, recreation clubs, educational and other classes, libraries, mutual aid and pension funds, etc.? This is a form of profit-sharing which is free from many of the objections advanced against the common type, where shares in the business are assigned to individual workers. The

committee which thus attains to the dignity of administering a fund, the common property, the result of the common effort, for the common good, will go far to solve many of the problems of modern industrial life. That such a committee is possible and workable will not be doubted by anyone with actual experience of any successful works committee to-day. Mistakes would, of course, be made at first, but they would be mistakes for which employers and workers would share the responsibility, and there would be far less likelihood of serious mistakes being made when the experiments were guided by those with intimate knowledge of both sides of any question rather than of only one. The value of the great achievement of uniting the whole of any industrial unit to work together for a common end would far outweigh any danger resulting from the unsuccessful experiments they might make.

Reference has been made to the importance of the careful selection of the worker and his subsequent place in the factory. This is a point which we feel needs particular emphasis, as it is intimately related not only in its narrower aspect to the happiness or misery of the individual worker, and to the successful carrying on of any particular industry, but also to the wider problems of general unemployment and national education. Neither of the two latter problems can hope to be solved satisfactorily unless they go hand in hand with an organized and intelligent system of fitting the right person into the right job, with due regard not merely to what can be drawn out of him by the pressure of necessity and circumstance, but with regard also to the discovery of that power in the worker which he will use with spontaneity and joy. It is within this region that the industrial world has most signally failed in the past, and the possibilities of which the pioneers of industrial reform are still only exploring. It is here that we meet with some of the most tragic kinds of unemployment and discover numerous instances of that arrestment of the mental and physical development of the individual which cripples or deforms later life.

This fitting of the right person into the right job is met by two obstacles which are easy to state, but exceedingly difficult to overcome. They are, however, so important that, at the cost of an apparent digression, we must for a moment notice, though it is impossible to discuss them fully, for they open up very widespread and contentious issues. Besides the carelessness in the selection of the worker by those responsible for their employment, the questions of the status and pay loom largely in the thought of the workers themselves and help in the maladjustment within the industrial unit. Take for instance the following incident : A number of women were being interviewed for work in a factory for which a large variety of labour was needed. One woman from the country, accustomed to an open life, and eminently fitted for work in the yard for which there were several vacancies, chose, in preference to this,

work in a hot mill because of the larger pay it carried. As a result, at the end of four months, the whole spirit and physique of the woman had deteriorated. She had to give up for a time and was, eventually, reinstated as a worker in the yard, where she quickly recovered strength and spirit.

This is but one instance among many, and this kind of thing is continually happening both among brain workers and hand workers. Men and women, either because of the status or pay connected with it, are constantly tempted to undertake work for which they are either temperamentally or physically unfitted. The result is rarely satisfactory, and often disastrous. There seems, however, no complete remedy for this save in the acceptance of the fact that all sincere work is equally honourable, and though, in the present organization of society, some differences of pay and of status are inevitably linked up with grades of work, there is room for much levelling, both up and down, in many spheres of activity, which would materially help to remove some of the temptation to maladjustment on the part of the worker himself. This, as we have said, opens up big issues and cannot be discussed in this connection. It is sufficient to remember that, limited unduly as we necessarily are at present by these questions of status and pay, often accentuated by carelessness in wage-fixing and unintelligent custom, there is still a large area in which an educated sympathy and intelligence can be used with much real benefit, both to the individual worker and to the larger body of industry, by careful attention to suitable selection and placing in the factory or shop.

This means very active co-operation, not merely with the management, foremen, and workers themselves, but with outside agencies —such as the education authorities, after-care committees, and the employment exchanges of the locality. Co-operation with the after-care committees may be made especially fruitful in connection with the younger workers, and the possibilities which lie in close co-operation with the employment exchanges have still to be explored in the large majority of industries. The whole question of employment as regards this latter agency needs to be considered more seriously both by the exchange, the employers, and the employees than has been the custom in the past. Much good and faithful work has, in some places, been done by exchanges, handicapped as many of their workers have been by their ignorance of the significance of the work they are attempting to do, and their very limited knowledge of the social problems with which it is linked up, as well as by the unreasonableness of some who apply for their help. But if the co-operation of the employment exchange with the employer is to become really fruitful, the exchange officials will require a much wider training and knowledge of the issues involved in their work, while the average employer must make a more intelligent use of the facilities offered.

Much, however, can be done in the immediate future even under

existing conditions, given the will to co-operate on both sides. The experience of one firm in this connection is interesting: A large number of women and girls were required in a factory at the beginning of the war. Many workers known to individual foremen and workpeople were told to appear at the gate on a particular morning. Others were bespoken by the management from the employment exchange, but with no detailed description of the work to be done or the type of woman desirable for the different departments. A crowd of women and girls of all sorts and descriptions, both from the employment exchange and from those who had heard of the vacancies in other ways, waited at the gates to be "taken on" —all having some kind of assurance that either because they had been sent by the exchange, or were known to a particular foreman, they were suited to the job and could begin forthwith. The fact that departments were waiting for the labour further complicated matters, and a number were taken on, hurriedly, and the necessary weeding-out and adjustment left to the future, while scores of disappointed workers—these also both good and bad—were turned away. The first month showed the futility of the promiscuous methods which had been adopted. There were daily dismissals, and a large number who worked for a short time only, and then for no apparent reason did not appear again. The time, clerical labour, and interruption which this involved added greatly to the cost of the labour engaged. The desirability of treating engagement and selection rather differently was evident. Difficulties, of course, had to be met—especially the difficulty caused by the time-honoured custom of engagement through the personal recommendation of a foreman, and, in the hands of a really good man, one that has distinct points in its favour. However, an amicable arrangement was made that every consideration should be given to applications by workers personally recommended by foremen, but that this should not preclude their passing through the employment exchange, or the necessity of their being selected by the welfare worker. If at either of these points the applicant was for any reason deemed unfit for the job, the foreman would acquiesce in the decision. On the other hand, any worker, having both passed the exchange and been selected by the welfare worker, must have the engagement ratified by the foreman, who would have the power of refusing the applicant on technical grounds. This worked admirably, and the result was seen in better and more sustained work, and in a great reduction of dismissals.

Such an arrangement involves a good deal of work in the background with the employment exchange itself. In the particular instance given it meant, first of all, a visit to the exchange, a personal acquaintance with its officials, and a talk over the whole question of employment. It meant, in the second place, a visit of the officials themselves to the factory and an explanation of the processes by the foreman. This visit was repeated at intervals of

one or two months throughout the year, until they had a very fair knowledge of the work to be done and the type of woman required for doing it. It demanded time on the part of both exchange officials and management and real co-operation from the foremen. But it meant that in the end much time, labour, and friction were saved to all concerned. Whereas the exchange had at first laboured in ignorance and isolation, and many of the applicants sent had to be refused, it now worked with knowledge and co-operation, and the type of worker sent invariably approximated towards the type of worker required.

The question of selection is, of course, only the beginning. If that true relationship between the members of industry is to be established for which welfare work stands, it means a constant watchfulness and care of the demands of the life within its borders. Larger interests are usually looked after on the one hand by the Directorship or the Federation of Employers, and on the other hand by Trade Unions. By these the letter is laid down. The spirit, however, can only be created from within—the spirit of real consideration of the value of life itself, by all, and towards all, in the numberless smaller interests of which the greater ones are in reality composed.

Closely linked up with the whole question of employment, therefore, is that of dismissals, which touches intimately the vexed problem of the security of the workman, and the authority of the management. This also is a question which asks for a much fuller treatment than is possible in this connection, but again, it is so bound up with the whole question of welfare work that it must be touched upon in outline now. The casual way in which men and women in the past have often been engaged and dismissed is responsible for more evil in the industrial and social world than can well be estimated. It is one of the primary functions of welfare work to see that the possibilities of these evils are at any rate lessened. To achieve this, in reference to dismissals, is perhaps more difficult than in reference to engagement, for in connection with dismissals there are often many personal and psychological factors to be considered which do not take such a prominent place in the matter of engagements. Also, if it is a question of blame it is often exceedingly difficult to trace its true cause and to administer justice. The loss sustained by dismissal is usually out of all proportion to the offence. The power to deprive a man or woman of the source of his livelihood at a short notice, without thorough investigation of the nature of the offence and consideration of the circumstances, should never belong to one man or group of men. This requires close and unprejudiced inquiry, and a fine balancing of rights and duties. Yet neither should careless and inconsequent behaviour, which ignores the claims of order and authority and the dignity of work, be allowed to continue without serious consequences to the offender. In either case social harm and discord are bound to result. Neither,

however, should the decision rest with the welfare worker—though he may well be used by either side for making such inquiries as may guide the administration of justice. It is in such things as these that the services of a live works committee, thoroughly representative of workers and management, may be of such real value. It is scarcely necessary to suggest methods by which such a committee might attain the permanent welfare of all the factors concerned in regard to every side of the question of employment, especially that of dismissal or of transference from one department to another. Different committees might vary considerably in the detailed working of their methods of procedure. The point to be emphasized is, that these things should be the function, not of one particular person, but of a thoroughly representative body, standing not merely for production but for the interests of life and for the establishment of justice. Much of the activity necessary to achieve this would, probably, devolve on the official welfare worker, but the work itself would be that of co-operative effort, and would give added meaning and status to the works committee.

The rather detailed description given above of the possibilities which lie in the development of the works committee has been necessary because we believe that some such machinery is imperative if the spirit and activities of true co-operation, without which nothing can really be achieved, are to find expression and growth. A works committee of sorts is becoming a commonplace in industrial organization; a works committee, however, whose secretary (or some other appointed representative) shall be the paid servant, not of the management alone, but of the equal combination of management and labour of which the committee should consist, and whose corporate findings it is his duty to interpret into organization and life, is an idea which is at present in its infancy, and which can only be truly successful where the foundations of which we have spoken are present. The conception has the advantage of being adaptable to any industrial system whose stage has outgrown that of the dominance of the one or the few over the many, and which seeks not only material wealth but the welfare of human lives. This stage is being increasingly reached within a few advanced units of what has, in the past, been known as the capitalistic system, which have come gradually to a wider view of the meaning and possibilities of industry. It is the stage from which the pioneer idealists of the great co-operative societies implanted now in almost every country, theoretically started, and have practically reached on one side of their development, but which waits for some similar department to that which we have described (adapted to its organization), in order to extend the idea of co-operation more satisfactorily to the producers within their structure. It is the stage towards which a few co-partnership

schemes (though by no means all) are rapidly moving. Many of these have approximated in name, but not in spirit, and this is one of the most subtle dangers in the present development of welfare work itself—a fact which needs to be keenly recognized and held in view. It is the foundation upon which also the Guild Socialists are building their structures, though the extreme Left are seeking to prepare those foundations by methods which appear to many to lack the requisites of a healthy and natural development, and to hold some danger of force being exercised in that realm where the voluntariness of the act is the condition of its life. Trade Unionism itself, for so long the protesting under-dog of industry, at the present moment stands in the position of being able to choose whether it will seek a wider and fuller co-operation, recognizing standpoints and views of other sections of the community than itself, or whether it will, at the moment of its power, emulate the old ignorant and self-centred capitalism and miss the undoubted opportunity for progress and co-operative action which lies before it to-day.

To all these systems the welfare movement stands in intimate relation—asking, not necessarily for great changes in structure, but for the conscious turning from the spirit of dominance to the spirit of co-operation. This achieved—the attention of men in all classes being turned to the consideration of man as the most vital and fundamental thing in industry to-day—the actual machinery in which this spirit works is of secondary importance, since structure may be trusted to adapt itself, naturally and easily, to the spirit within.

The Measurement of the Balance of Trade.

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This article is concerned with the methods of measuring what is called the Balance of Trade. Stated more accurately, though less concisely, the object in view is to consider how we can estimate to what extent during any given year, persons normally residing in the United Kingdom have on balance become indebted to persons normally residing elsewhere, or to what extent the latter have become indebted to us.

I shall illustrate the discussion with figures relating to the year 1913—the last normal year before the war. It is hardly possible to make a satisfactory analysis by the usual methods with regard to the war period, and the flow of statistical information is likely to be deficient for some time to come. We are, however, able to make a rough analysis of the position in 1920, and I shall refer to this in the latter part of this article.

The material upon which an analysis of the trade balance must necessarily be based is the official returns of the value of imports and exports, which cover nearly all the material goods which we buy from abroad, as well as nearly all those which we sell. The principal gap in the import figures seems to relate to diamonds, imports of which are known from the South African export returns to be understated to the extent of £12,000,000 in 1913. The export accounts are also incomplete in this respect, exports of diamonds in 1913 being returned as nil. Another class of material goods not covered by the export statistics is second-hand ships, amounting in value to some millions of pounds.

While the official accounts of imports and exports can be tinkered by making allowances for these points and others, it is scarcely worth while spending much time and labour on the process, because any modification made in the excess of imports shown in the returns will be small, and the margin to be allowed for error in estimating other items in the international account is inevitably large.

These other items are the so-called "invisible exports," and the smaller, though not wholly negligible, "invisible imports." "Invisible exports" and "invisible imports" are so called not because they can in all cases be regarded as being in any sense exports or imports, but because they are items to be added to the exports and imports respectively when drawing up a full international trading account.

The principal "invisible exports" are:

(*a*) Receipts of the British mercantile marine in the foreign trade, less expenses in foreign ports, but plus expenses of foreign vessels in British ports.
(*b*) Services rendered by persons in the United Kingdom in connection with the financing and insurance of trade.
(*c*) Income from Oversea investments.
(*d*) Miscellaneous items.

I proceed to consider how the value of the principal "invisible exports" can be estimated. First with regard to shipping earnings.

(*a*) SHIPPING EARNINGS.

There are, broadly, four methods which may be adopted.

(i) *First Method.*—One is to ascertain the difference between the value of the imports into all countries in the world and the value of the exports from all countries in the world, which difference should represent, broadly, expenses of transport; and to take a proportion of this amount as representing the British share. Except for a certain time lag, and for a small proportion of exports which get lost on the way (and whose value is added through insurance to the cost of the remaining goods), the goods which are exported during any year are the same as the goods which are imported, so that the world's imports and the world's exports represent two valuations of the same goods. If exports were always valued f.o.b. and imports c.i.f., as in the British Trade Accounts, the difference between the two valuations would give a fair approximation to the transport costs. In point of fact, however, there are important differences in the methods and bases of valuation employed in different countries. A useful analysis of the statistical bases upon which the trade accounts of various countries rest is given in one of the reports (Paper No. V: International Trade) prepared for the International Financial Conference at Brussels held in September, 1920.

For the present purpose, the most serious defect in the figures results from the fact that the United States, Canada and South Africa value their imports f.o.b. at the port of shipment. Another, though no doubt less important, source of error results from the adoption of various systems of "official values" or "official estimates." This would not matter so much if we could suppose that official valuations introduced corresponding errors in both imports and exports. That, however, is not always the case. In Greece, import figures are based on an official valuation made in 1899, while exports are valued at current average market prices. The value of imports into Australia is based on the fair market value of the goods in the country of origin plus 10 per cent. to cover insurance and freight.

Another point to which attention may be directed is the possibility of important discrepancies between the export valuations and the import valuations of goods sent across land frontiers.

The excess value of the world's imports of merchandise in 1913 over the world's exports amounted to some £361,000,000. If we assume that the amount to be added for freight and insurance to the f.o.b. value of imports into the United States, Canada, and South Africa is no more than 10 per cent.[1] of the total value of the goods imported into those countries by sea (and there is reason to think that in 1913 it was more than 10 per cent.), some £42,000,000 must be added, bringing the world's excess of imports in 1913 to some £403,000,000.

On the basis of the tonnage of the British mercantile marine, or of tonnage entrances and clearances in the principal ports of the world, rather over 40 per cent.[2] of the total excess of imports (say £165,000,000) may be taken to be the gross sum attributable to the United Kingdom, before deducting expenses of ships in foreign ports.

This sum of £165,000,000 excludes shipping receipts from passenger traffic, but includes, in addition to freight receipts for the carriage of merchandise, certain other costs connected with transport—particularly profits on insurance of the goods and interest on the value of the goods while in transit. The whole sum represents "invisible exports," excepting such part as is expended abroad for bunkers, port dues, etc. This part should be deducted, but as a partial set-off against it, it is convenient to add an amount representing expenditure by foreign shipowners in the United Kingdom, which is an "invisible export." The net deduction would not, I think, exceed £30,000,000, so that we are left with some £135,000,000 attributable to the United Kingdom on account of freight and other costs of transport. If, anticipating a later argument, we put insurance and financial charges upon trade at about 2 per cent. of the value of our imports and exports, we reach the conclusion that in 1913 some £105,000,000 might be attributed to shipping, and some £30,000,000 to other costs connected with transport.

If earnings from passenger traffic,[3] as well as from cargo traffic, were taken into account, a substantial addition would have to be made to the £105,000,000, bringing it, I suppose, to at least £120,000,000.

[1] With regard to this figure it may be noted that the excess of imports, namely, £361,000,000, is more than 10 per cent. of the world's exports minus the imports from oversea into the United States, Canada and South Africa (£4,073,000,000 less £425,000,000). This total of the world's exports excludes in most cases re-exports, but includes a large value of exports across land frontiers. There is little doubt that on the whole ocean freights represent considerably more than 10 per cent. of the f.o.b. value of the goods exported. The official statistics of imports into Brazil give both the f.o.b. and the c.i.f. values. Freight and insurance represented in 1913 over 19 per cent. of the aggregate f.o.b. value of imports. In the case of manufactured goods alone the percentage was 14.

[2] I assume that the percentage would not be substantially different were financial, insurance and commission charges in connection with transport to be taken into account as well as freight.

[3] It may be noted that receipts from passage money count only to a limited extent as an "invisible export." The service rendered by a shipping company in carrying a British passenger to a foreign country is as a rule not an "invisible export."

On the whole this method of estimating shipping earnings is, I think, more useful for the purpose of comparing one year with another than for fixing the figure for a single year.

(ii) *Second Method.*—A second method by which the earnings of British shipping can be estimated is to ascertain the receipts per ton of shipping for foreign mercantile marines for which official statistics are published, or for those British shipping companies which publish information, and to deduce therefrom the aggregate receipts of the whole of the British mercantile marine engaged in the foreign trade.

The receipts of the Swedish and Danish mercantile marines, with regard to which elaborate official statistics are collected and published every year, suggest that the gross receipts of British shipping engaged in the foreign trade might be £132,000,000 in 1913 (on the basis of the Swedish returns) or £139,000,000 (on the basis of the Danish returns).

A few *British* shipping companies published information as to their gross receipts from freight and passage money. Following are some particulars :

	Year Ended	Freight Receipts, etc.	Gross Tons (Av. for year)	Average per ton
Passenger Boat Companies.		£		£
Cunard Steamship Co.	31/12/13	3,659,773	271,673	13·5
Peninsular & Oriental	30/ 9/13	4,894,000[1]	545,327	9·0
International Mercantile Marine[2] ..	31/12/13	9,504,000	1,090,678	8·7
		18,057,773	1,907,678	9·5
Cargo Boat Companies.				
Nitrate Producers' S.S. Co.	30/ 4/14	301,558	87,350	3·5
Orders and Handford S.S. Co.	31/10/13	129,463	15,100	8·6
Prince Line	30/ 6/14	1,229,775	267,075	4·6
Taylor and Sanderson S.S. Co. ..	12/10/13	140,944	21,660	6·5
Wetherall S.S. Co. ..	30/ 9/13	58,581	4,350	13·5
		1,860,321	395,535	4·7

Unfortunately the number of companies which published information was small before the war, and is now smaller still. The information, such as it is, suggests that the earnings of cargo boat companies in 1913 amounted to rather less than £5 per gross ton of shipping, while the large passenger line companies earned about £10 per gross ton of

[1] Excluding interest on investments, approximately £100,000.

[2] This is an American company, but much of the shipping owned by it is under the British flag.

shipping. On the assumption that 60 per cent. of the mercantile marine consisted of tramps, and the remainder of liners, we should reach a total of about £125,000,000 as the gross earnings of the British mercantile marine engaged in foreign trade in 1913.

In framing this estimate, as also the other estimates of shipping earnings here given, no account has been taken of the facts that a considerable amount of tonnage on the Register of the United Kingdom is really foreign owned, and a considerable amount of tonnage on foreign registers really British owned. These points may best be taken into account when considering, at a later stage, the amount of foreign capital invested in this country and of British capital invested abroad. In the present calculations it has been assumed that the shipping earnings which have to be taken into account are those from all vessels on the Register of the United Kingdom which are engaged in the foreign trade.

An important point to be borne in mind in connection with this method of estimating the earnings of the mercantile marine is that the gross sum paid to shipowners covers, in many cases, the expenses of loading and unloading goods. To this extent the estimates should exceed those made on the first method, or on the method next to be described. Costs of loading and unloading do not require to be taken into account in the international balance sheet, and a deduction—not exceeding, I think, £10,000,000—should be made for this reason from the gross receipts of shipowners.

(iii) *Third Method.*—A third method of estimating the earnings of the mercantile marine is to work out what amount would be required to cover expenses on the basis of time charter rates, adding on charterers' disbursements for bunker coal and port dues. That is to say, British mercantile shipping is regarded as being time chartered for general trading, and the aggregate of the charter money, together with charterers' disbursements for bunkers and port dues, are regarded as the gross income of shipping. The charter money can be estimated from published market rates, and expenditure on bunkers can be estimated from official returns of coal supplied to vessels in the foreign trade. A further sum has to be added for foreign bunkers and port dues.

An estimate on this basis for the year 1913 was published in the *Board of Trade Journal* of February 3rd, 1921. The figure reached is £110,000,000—an amount somewhat below the sum indicated by the two other methods discussed above.

One of the difficulties of this method of estimating is to allow for the superior earnings of passenger vessels ton for ton as compared with cargo boats. Quoted rates for time charter relate to ordinary cargo boats, and in applying them to faster vessels we must multiply by some factor which will represent the greater number of voyages which the latter make in the course of a year. Some allowance is made in the estimate which appears in the *Board of Trade Journal* for the higher earnings of liners, but it is not stated how much.

A more general objection to this method is that movements of tramp freights are not a satisfactory index to movements of other shipping rates. It is notorious that the earnings of tramp boats fluctuate much more than earnings of other kinds of vessels. Nevertheless in the long run tramp rates and other shipping rates move together.

After deducting expenses abroad, the net income derived by this country from shipping in 1913 is put in the *Board of Trade Journal* at £94,000,000, a figure which (in view of the higher amounts which are suggested by some of the other methods of approach) possibly errs on the side of moderation.

(iv) *Fourth Method.*—Another method is to ascertain the distribution of British shipping on the principal routes, and from published rates of freight for important commodities the approximate receipts on each route. Some material for an estimate on these lines is contained in the issue of the *Board of Trade Journal* referred to above, where the method is used for ascertaining the percentage increase in shipping earnings between 1913 and 1920.

(*b*) FINANCE, INSURANCE AND COMMISSION CHARGES.

I pass now from the question of shipping earnings to the question of finance, insurance and commission charges. The great bulk of British imports and exports and a large volume of inter-foreign trade are financed and insured in London.

Dealing with the question of the amount at which these charges should be valued, Giffen wrote in 1882 :

" I have already drawn attention to the point that the shipowner is not the only person concerned in the cost of conveyance, of which the aggregate excess of imports in the imports and exports of the world are composed. There are other commissions and charges, of which I have suggested that the English share amounts at least to 16 million pounds ; perhaps 20 million pounds would be nearer the mark. The latter sum is only 2½ per cent. on the total of our imports and exports—about 800 million pounds ; and when I point out that insurance cannot be estimated at less than 15s. per cent., and bankers' commission, bill stamps and minor charges 5s. per cent., leaving only 1½ per cent. for all other charges, the estimate must be held to be moderate."

In connection with this estimate, there is one point to which criticism may be directed. Giffen reckons insurance at 15s. per cent., but this apparently takes no account of losses payable by underwriters, amounting probably to two-thirds of the premiums. For this reason it would appear that Giffen's percentage ought to be reduced from 2½ per cent. to 2 per cent.

I have made some inquiries as to whether Giffen's figure might be considered to have been reasonable immediately before the war. From the replies I should judge that it was reasonable in 1913, but is too small as applied to present conditions. Reducing Giffen's

figure to 2 per cent. to allow for underwriters' losses, and applying this percentage to the total of British imports and exports, we get a figure of £28,000,000. This is probably below the actuality, as a very large amount of inter-foreign trade was financed or insured through London. No doubt, some British trade is not financed or insured here, but the volume of purely foreign trade which is financed or insured here much more than offsets this. Some years before the war, it was estimated that about £100,000,000 of foreign bills were discounted in London.

(*c*) INCOME FROM OVERSEA INVESTMENTS.

Having considered broadly the question of estimating freight earnings and insurance and financial earnings, I turn to another "invisible export" which must be taken into account, namely, the income derived from capital invested abroad.

Estimates of income derived from British capital invested abroad are based upon Income Tax Statistics showing the amount of income from certain kinds of investments which come under the purview of the Income Tax authorities. The amount of income which was identified as having been derived from investments abroad was £116,382,000 in 1913-4, exclusive of a small amount of foreign and colonial dividends belonging to persons not resident in the United Kingdom.

The Income Tax authorities identify only part of the income from investments abroad. They do not separately earmark income from :

(i) Concerns (other than railways) situate abroad but having their seat of direction or management in this country.
(ii) Foreign and colonial branches of banks, insurance companies and mercantile houses in the United Kingdom.
(iii) Mortgages of property and other loans and deposits abroad belonging to banks, insurance companies, land mortgage and financial companies, etc., in this country.

According to Dr. Stamp, some £50,000,000 to £60,000,000 of profits are known to be included by the Income Tax authorities under the heading "Businesses not otherwise detailed" in Schedule D, covering rubber, tea, oil and mining companies abroad ; and Sir George Paish, who has for a number of years made a detailed study of the matter, concludes (after examining the accounts of a very large number of companies and making other inquiries) that the annual income from capital publicly and privately invested abroad amounted, at the end of 1913, to over £200,000,000. This figure has, I think, been fairly generally accepted.

(*d*) MISCELLANEOUS ITEMS.

In addition to this income of £200,000,000 from investments abroad, a substantial sum, amounting, I think, to at least £10,000,000,

was received as payment for management of capital invested abroad. This would cover London office expenses of British companies carrying on business abroad, auditing and legal expenses. It would also cover payments to London agents for managing colonial and foreign loans, including such services as the advertising of drawings for redemption. To give one example only, over £61,000 was paid by the Government of India to the Banks of England and Ireland in 1913-4 for the management of its debt in the United Kingdom, interest on which amounted to £2,088,000.

Miscellaneous "invisible exports" include also profits made by British merchants in trade in and between foreign countries. For example, if a British merchant buys steel in the United States and sells it in Japan, any profit which he makes may be regarded as an "invisible export" and may suitably be included with these miscellaneous items. It is possible that some of the profits made upon the importation of goods into the United Kingdom and upon exports may also be "invisible exports." This would be the case with imported goods if the c.i.f. value included any element of importers' profits, and in the case of exported goods if exporters' profits were not included in the f.o.b. valuation. When prices are rapidly rising it would seem that this element may be important, but it would probably be unwise to reckon it at a high figure in normal times.

In connection with mercantile profits upon foreign trade, care must be taken not to reckon these twice over. Some of the profits earned by foreign branches of British mercantile houses are included in the £200,000,000 of income from investments abroad, and must not therefore be counted a second time. The same applies to profits made by foreign branches of British banks and insurance companies.

A number of other minor sources of income would also have to be taken into account in a perfect analysis of the trade balance. A considerable sum accrues to this country as payment for administrative and military services in various parts of the world. For example, Indian Army officers and civil servants send part of their pay to their families at home, and when they retire their pensions are remitted to them here.

Considerable remittances are also made by business men stationed abroad and by other persons who have emigrated.

Another item is the expenditure in this country of Americans and other foreign visitors. Minor items are the value of services rendered by British Submarine Cable Companies on foreign account; the value of contributions by journalists in the United Kingdom to foreign periodicals, and the expenditure of foreign diplomats in the United Kingdom.

These miscellaneous "invisible exports" undoubtedly amount to an important total, which I have put in the summary table at the end at £25,000,000.

"INVISIBLE IMPORTS."

The "invisible imports" include:

(*a*) Income derived by persons normally resident abroad from investments in this country and profits from businesses or branches in this country, and from foreign ownership of British ships.

(*b*) Miscellaneous items, such as expenditure by British tourists abroad; expenditure by British diplomats abroad; oversea expenses of the Army and Navy (except in so far as represented by shipments of Government owned stores from the United Kingdom or by local contributions; and payments made to journalists abroad for contributions to British periodicals.

In the summary table at the end I have put the value of these items at £20,000,000.

II.—BALANCE OF TRADE IN 1920

In this section I propose to deal briefly with the changes that have occurred in the trade balance as a result of the war, and in particular with the figures for 1920.

It should be remarked at the outset that the idea of a "balance of trade" is even more abstract as applied to the conditions of 1920 than it was as applied to pre-war conditions. The people of the United Kingdom were even then both borrowers and lenders as against other countries, but the creditor transactions far outweighed the debtor transactions. The present position is that in our relations with certain countries—especially the European belligerent countries—we are creditors to an overwhelming extent; while in our relations with other countries—especially the United States—we figure heavily as debtors. In estimating the trade balance during 1920 we set off a loan to us of a given amount (say, from the United States) against a loan by us of the same amount (say, to France), and regard the two transactions as cancelling one another. That is perhaps the only possible method of procedure. It is well, however, to bear in mind that the assumption is in some degree a fiction—a fiction which may be useful enough and sufficiently true under normal conditions, but possibly worthless and false in abnormal conditions. If our European creditors default, we are still left with our indebtedness to the United States.

Attempts to estimate the present position are, of course, bound to involve a wide margin of error, because the flow of statistical information upon which estimates must be based has been interrupted, and a good deal of evidence which will sometime be available has not yet been published. Moreover, a number of items enter into the account, which either did not exist before the war or were comparatively unimportant; and the magnitude of these new items is not precisely determinable. The broad facts are, however, fairly

clear, and enable a preliminary account to be given of the position in 1920.

The recorded excess of imports, including the precious metals, amounted to £335,000,000, compared with £147,000,000 in 1913.

The figure of £335,000,000 is subject to correction, as pointed out earlier in this article, in respect of goods omitted from the trade accounts, e.g., diamonds and second-hand ships. It has been suggested that a special correction should also be made in the figures for 1920 on the ground that the greater part of the excess of exports of gold (which amounted to some £43,500,000), represented German gold, which was merely lodged here for a time on account of New York, and therefore did not create a credit in favour of this country. On the other hand, it is believed that considerable amounts of gold shipped to America on British account were taken from stocks held outside the United Kingdom. No substantial modification in the apparent excess of imports need therefore perhaps be made on account of the shipments of German gold.

(*a*) SHIPPING EARNINGS.

With regard to freight receipts, an estimate can be made on the lines of the third method described above ; that is to say, receipts can be estimated on the basis of time charter rates. An article in the *Board of Trade Journal* of February 3rd, 1921, gives the results of a calculation made according to this method :

	Year 1913	Year 1920
	£	£
Charter Money	75,000,000	288,000,000
Bunkering in U.K. Ports	17,000,000	66,000,000
Bunkering in Oversea Ports ..	6,000,000	30,000,000
Port Dues	12,000,000	32,000,000
	£110,000,000	£416,000,000

The gross earnings (before deducting expenses abroad) amounted to £416,000,000 in 1920, compared with £110,000,000 in 1913. The article referred to contains an alternative estimate of shipping earnings in 1920, made on the lines of the fourth method described above ; that is to say, by analysing the distribution of British shipping on the principal ocean routes and the rates of freight for important commodities. This method suggests that the gross earnings of British shipping in 1920 were 3·5 times as great as in 1913. The figure for 1913 being taken as £110,000,000, the corresponding total for 1920 works out at £385,000,000.

The mean of the two estimates for 1920 is about £400,000,000 before deducting expenditure abroad. The net earnings (after deducting expenditure abroad) are put at £340,000,000 in 1920, compared with £94,000,000 in 1913.

(*b*) FINANCE, INSURANCE AND COMMISSION CHARGES.

With regard to financial and insurance earnings, if these represented only the same proportion of the value of imports into and exports from the United Kingdom, as before the war, namely 2 per cent., there would have been an increase from about £28,000,000 in 1913 to some £58,000,000 in 1920. There is some reason to think that these charges represent a higher percentage of the value of trade than was the case before the war. I am informed that the charges for insurance, commission and interest upon shipments of cotton goods might fairly be reckoned at 2½ per cent. before the war. At the present time (autumn of 1920) they amount, according to one estimate which has been sent to me, to 5 per cent., and according to another to 4⅔ per cent. In the case of machinery, the charges are estimated to have increased from 6 per cent. of the f.o.b. value before the war to 11 per cent.

The increase in the percentages is no doubt attributable to an important extent to the increase in the rate of discount during the war. The average market rate of discount for three months commercial bills was in 1913 £4 15s. 5d., and in 1920 £6 7s. 11d. This means an addition of 8s. 1½d. in the amount of the discount paid during the three months.

Increased risk of loss to underwriters (for example, through pilferage) appears to be another element, but such losses have to be deducted when estimating the net amount of these charges. On the whole, the percentage may, I think, be safely raised from 2 per cent. to 2½ per cent. If this figure is applied to the aggregate value of imports into and exports from the United Kingdom during 1920, we get a sum of £72,000,000, or, say, £70,000,000 if an allowance is made for the fact that imports are valued c.i.f. and not f.o.b.

This total seems suspiciously large in comparison with the figure (£30,000,000) for 1913. Probably the amount of trade financed and insured through London has not increased in value in proportion to the growth of trade to and from the United Kingdom alone. Before the war much Continental trade was financed in London, and the trade of the European belligerents has not recovered so rapidly as that of this country. Moreover, it may be noted that a certain amount of trade (especially South American trade) which was formerly financed in London is now financed in New York.

On the whole, it would, perhaps, be unwise to put the total under this head at more than £50,000,000, compared with £30,000,000 in 1913.

(*c*) INCOME FROM OVERSEA INVESTMENT.

I turn now to the question of income from investments abroad. The net amount of this has greatly diminished as a result of extensive sales of pre-war holdings of foreign securities, and of borrowings abroad—especially but not exclusively in the United States.

An official return (No. 144 of 1920) showing in detail the External

Debt of the United Kingdom at March 31st, 1920, gave a total at that date of £1,278,714,000. Of this, it is stated that some £113,500,000, representing loans from certain Allied Governments, "may be regarded as available to set off against debts owed by the same Governments to this country." This leaves £1,165,214,000 net of external debt, an amount which has by the present time been considerably diminished.

In addition to this debt our pre-war holdings of foreign securities have been reduced by sales. The Dollar Securities Committee purchased some £178,000,000 of dollar securities for resale in New York, and it is known that there was extensive selling of securities on private British account before the Dollar Securities Committee commenced operations. The amount of such sales is not accurately known, but it has been estimated[1] that the amount of securities returned from Europe to the United States during the whole of the war period amounted to $2,000,000,000, of which some $400,000,000 represented railroad securities sold to America during the six months ended January 31st, 1915. Doubtless the bulk of these sales were on British account. There were also sales of securities in such countries as Canada and Japan.

It should be borne in mind that our net income from investments was diminished in other ways also:

(*a*) There was, during the war, a transference to London of bank and other balances, both British and foreign owned.
(*b*) Foreigners subscribed for considerable quantities of British internal loans.
(*c*) Capital was in some cases withdrawn from abroad by the non-renewal of maturing obligations.

The next Report of the Commissioners of Inland Revenue, if it resumes publication of information as to income from investments abroad, which it gave before the war, and also as to income from various securities which is exempted from tax on the ground of being foreign owned, should throw a good deal of light upon the whole question.

I think it is a reasonable guess that, on the whole, in place of an income of £200,000,000 derived from foreign investments before the war, we received last year £120,000,000.

It is no doubt true that in some directions the income from pre-war investments has increased, but it does not seem probable that such an increase much more than balances losses in other directions, notably upon investments in Russia and other European countries, and upon railways in Canada and South America. A considerable part of British capital invested in non-fixed interest securities is represented by tea and rubber estates and gold mines which were not particularly prosperous in 1920.

[1] See a careful and comprehensive study by C. J. Bullock, John H. Williams and Rufus S. Tucker, of the Trade Balance of the United States, which appeared in the *Review of Economic Statistics* for July, 1919.

No account is here taken of the war debt owed to us by our European Allies. Interest is not being paid upon this debt, and it seems likely that neither the principal nor the interest will ever be paid. The debt owing to us from the Continent must, therefore, be distinguished from the debt owing by us to the United States upon which interest is being funded.

(*d*) MISCELLANEOUS ITEMS.

There has perhaps been some increase in the aggregate value of these items. Administrative expenses of British companies with a purely foreign business, but with the seat of management here, have no doubt risen, but the expenditure of foreign tourists was probably less than in 1913, owing to the reduced number of such tourists. Mercantile profits in inter-foreign trade were certainly high during the early months of the year while prices were rising, but less in the latter part of the year when prices were falling. It is impossible to say how they compare in the aggregate with the results for 1913.

Payments to this country for administrative and military services in various parts of the world are no doubt greater than was the case in 1913.

A special item to which reference may be made is the sale of surplus war stores lying in foreign countries. These amount to an important total. During the period between the Armistice and March 31st, 1920, sales abroad reached over £43,000,000. Opinions will no doubt differ as to whether such of these sales as were effected during 1920 may legitimately be regarded as representing an "invisible export" during that year.

Another point to be borne in mind is reparation payments by Germany, including the value of ships handed over to this country. In a sense these payments certainly affect economic conditions to our advantage, but I do not propose to take them into account in the present computation of our trade balance.

"INVISIBLE IMPORTS."

These are in some directions probably greater than was the case before the war, but in other directions smaller. Account has already been taken of the amount of interest which has to be paid upon foreign debt contracted during the war, the "invisible export" represented by income from British investments oversea being estimated to this extent on a net basis.

It seems likely that the oversea expenses of the Army and Air Force (other than those met by shipments of Government owned stores from the United Kingdom or by local contributions) are considerably larger than was the case before the war. During the war the Army in Mesopotamia was largely supplied from India, though the ultimate expense fell upon this country; and if this is still the case the goods supplied from India have to be paid for just as much

as they would have to be were they imported into the United Kingdom.

The "invisible import" represented by the expenditure of British tourists abroad has probably not yet increased to pre-war dimensions.

CONCLUSION.

If the estimates here given are even approximately correct, a very large sum, amounting to between £150,000,000 and £200,000,000, became available in 1920 for redeeming foreign debt or for making investments or advances abroad. The surplus has, in fact, been used for all these purposes.

Considerable investments have been made on the Continent of Europe by the purchase of business undertakings there. The amount of long term credits granted must also be large. Moreover, throughout the year there has been a continuous inflow of foreign securities from the Continent—European Government loans, South American and Chinese Government loans, oil shares, mining shares and many others.

In connection with the liquidation of our foreign debt, the most noteworthy feature of the year was the redemption of our share of the Anglo-French Loan floated in the United States in 1915. The amount redeemed by us was $250,000,000 and the cost in sterling about £59,000,000. This event would have been more satisfactory had it not been necessary at the same time to fund the interest on the debt owing to the United States Government.

It is doubtful whether there has yet been any diminution on balance in the net amount which we owe to the United States, taking all capital transactions public and private into account. For not only have we funded interest on our debt to the American Government, but we have also sold in America a considerable amount of such dollar securities as were left to us, and some South American securities. Very large advances have also been made by the American banks to businesses in this country, though doubtless these were largely made in 1919.

Dr. Anderson, of the Chase National Bank, estimates[1] that the unfunded debt of Europe to the United States grew between January 1st, 1919, and September 15th, 1920, by about $3,772,000,000[2] (say £1,000,000,000 at the present rate of exchange).

The greatest part of this debt, he says, was piled up since the middle of 1919, as the American Government had practically ceased making advances for financing export trade by that time.

[1] See *Chase Economic Bulletin*, Vol. 1, No. 1, October, 1920.

[2] This figure has not been unchallenged. In a paper on the Foreign Trade Balance of the United States since the Armistice (*American Economic Review*, March, 1921), Professor J. H. Williams gives a preliminary estimate of only $2,852,000,000 for the period January 1st, 1919, to November 1st, 1920. In the discussion on Professor Williams' paper, moreover, Mr. Raleigh S. Rife argued that even the latter figure was much too high, his own estimate being not more than $1,274,000,000.

He attributes the building up of this large unfunded debt primarily to the intermediation of London, which, he says, has largely assumed financial responsibility for the Continent, and has stood between the United States and the Continent in the process. "London," he says, "has purchased with sterling (or with short term dollar obligations) the great bulk of the franc, lire and other Continental exchanges created in the United States, and has in other ways provided dollars for the use of the Continent. London has also purchased great quantities of goods from the United States and other parts of the non-European world for cash, or on short credits, which she has resold to the Continent on long credits."

This quotation from the pen of an American economist, strikingly testifies to the dominant position which London is still felt to occupy in the world of finance, and emphasizes the remark which I wish to make in conclusion, namely, that for some years to come great importance must be attached to having a large surplus available on the one hand to assist Europe in getting on to its legs again, and on the other hand to pay off our debt and promote new developments in the dominions and in foreign countries.

SUMMARY OF TRADE BALANCE IN 1913 AND 1920.

	1913 Millions £.	1920 Millions £.
Excess of Imports (including gold and silver) ..	147	335
Add Invisible Imports, say	20	20
Total	167	355
Deduct Invisible Exports :		
Shipping Earnings	100	340
Finance and Insurance	30	50
Income from Investments	200	120
Miscellaneous, say	25	25
Total	355	535
Balance, representing Export of Capital ..	£188	£180

Marx and Marxists

By P. Ford.

The present article aims at making a brief survey of the main schools of Marxism with a view to discovering their most important theoretical differences. The difficulties are twofold; first, the immense volume of Marxist polemics; secondly, the refusal of the participants to confess any deviation from Marx, and the consequent necessity they are under of traversing the whole body of Marx's work, produced during many years, for textual support. In this article attention has been concentrated on the work of Bernstein, Kautsky and Lenin, as most representative of the various tendencies.

First, however, it may be useful to recall the principal elements of Marx's doctrines. The main driving forces of history are to be found, not in thought, but the material conditions of life. Of these the most important are the productive forces, labour and invention. These productive forces, however, do not work *in vacuo*, but within the framework of laws as to property, social classes, and of a definite form of state. Now economic power precedes political power; as the productive forces expand, the older forms of property, old legal and political structures, are no longer suitable, and become fetters to them. The productive forces steadily develop till they burst the old social and political bonds. The actual change takes place through the medium of class struggles. All recorded history is the history of class struggles. The present struggle is between the bourgeoisie—the owners, and the proletarians—the propertyless. The opposition between the productive forces and their social and legal environment is thus transferred to classes. As the capitalist system develops, men are drawn into great factories, use common instruments, do work together, i.e., production is social in form. But at the same time capital is privately appropriated, distribution is private. These two conditions conflict, and by the means of increasing class conflict and crises, the old capitalist bonds to social production are burst asunder, and the new order of society, now with a framework suitable to the state of its productive forces, is ushered in.

We may begin our discussion by noticing two points about this. It has been concluded that this description implies (1) change by revolution, catastrophe; (2) economic determinism, inevitableness. It is true that many Marxians do hold views with those two qualities. Marx's Hegelian training left him with a passion for clear cut opposites, so we find the positive and the negative, thesis, antithesis, and synthesis, even in his treatment of social development, which thus progresses not by the gradual evolution of one form out of

another, but by catastrophic breaks. And Marx was also guilty of exaggerated language as to the influence of the economic factors of history. He speaks of iron necessity, and even says that "it is not the consciousness of men that determines their mode of existence, but on the contrary their social existence that determines their consciousness." Engels, however—Marx's watchdog—softens these expressions a good deal, and allows that sometimes political, legal and religious ideas may be the preponderant factors in determining the form of historical struggles, that they all react on the economic factors. Marx's forcible phrasing thus led many into a form of economic determinism, and even monism, which have no necessary connection with the kernel of Marx's thought.

It is this sharpened, deterministic form which is taken by much of the crude Marxism current amongst the working classes to-day. The reason for this is clear: such a theory does seem to correspond to their actual experience. In a mining village, practically the entire adult male population will be miners who work with their hands. The remainder will be composed of a few mining officials, tradesmen and professional men. There are thus two classes in their society—men who work in the pits with their hands (the great majority) and a few who do not. Many miners will not only work for the colliery company, but live in a house owned by the company, and overlooking the material equipment of the industry. Their whole lives are dominated by the industry in which they work, by their economic conditions. When a trade depression comes, pits are closed, and they are faced with unemployment and wage reductions. The two million persons on the unemployed register can scarcely hold any other belief than that of economic determinism, or avoid feeling themselves in the grip of impersonal, irresistible economic forces. And if at the same time they see concentrations of capital proceeding apace—like the trustifications of the South Wales coal industry in recent years—their experiences are still more akin to those described by Marxian theory. It is easy to see, therefore, why that theory has so strong a hold in some industries and some districts: it does roughly correspond to the actual conditions of life of the workers. And it is not hard to understand how they narrow the meaning of "material conditions" to "economic conditions," tend to make the theory deterministic, and in their resentment seize on the idea of progress by revolution. Given such conditions of economic and social life, there would be Marxism even had there been no Marx. The creed is the expression of deep social want and urgency. Indeed, since the "new technique," periods of economic and social dislocation have always produced some such theory. For instance, in 1825, Thomas Hodgskin published *Labour Defended*, and in 1827 *Popular Political Economy*. Many of the elements of Marxism are already present. The driving forces of society are regarded as increase of population and inventions, the political organization of society depends on the mode in which pro-

perty is distributed, economics precedes politics, laws are made, not by labourers, but by other persons, who use them to appropriate wealth, the subjection of labour is due to the legally sanctioned demands of capital, and there is a fierce contest between capital and labour because the workman is deprived of all the produce of his labour but bare subsistence. Marx did not write his theory in 1825, but Thomas Hodgskin did. When economic dislocation is great, and social conflict intensified, the incipient Marxism of the working classes crystallizes into a theory.

How far are these qualities found in the various schools of Marxists? It will be found that the main points of conflict concern historic necessity, social catastrophe, and the place of democracy in the class struggle.

Bernstein, in *Evolutionary Socialism*, commences his discussion by distinguishing pure science, principles held to be true generally, and applied science, the application of these to particular cases. This enables him to cut away the inessential, variable elements of Marxism, so as to leave the stable elements. The latter consist of historical materialism, the theory of class struggles, and the theory of surplus value. He then rejects definitely the idea of the inevitableness of social revolution. Historical necessity, in the Marxian sense, depends on the assumption that economic factors only determine the course of historical changes. Not only did Marx and Engels admit the importance of other influences (as we have seen above), but in modern life economic factors are playing a smaller part than formerly. As man learns the control of natural forces, discovers how to feed and clothe himself better and more easily, he frees his cultural life—art, morals, science—from the shackles of material need. Further, as we acquire more and more insight into the laws of social evolution, we steadily develop our power of directing its course.

But he also refuses to believe that social democracy will come by a catastrophe. Two factors essential to the theory of catastrophe—the lining up of society into two hostile classes, proletarians and capitalists, and the concentration of industry—are not operating as Marx suggested. On the one hand, owing to the rise of joint stock companies, the numbers of the possessing classes have increased and not decreased. Recent developments show "not a decreasing number of large capitalists, but an increasing number of capitalists of all degrees." The middle class does not disappear, but merely changes its form, older elements now being replaced by technicians, civil servants and professional men. Nor is the concentration of industry being carried out with equal speed and thoroughness in all branches; the movement is still slow in agriculture, while in businesses dependent on personal service, or subsidiary to great staple industries, small and middle-sized firms abound and prosper. Finally, democracy has made a catastrophe unnecessary. Its growth has synchronized with the development of collectivism. On the

one hand, the worst extravagances of capitalism have been removed, on the other, working class organizations—unions and co-operatives —have been given scope for development, thus placing increasing limitations on autocracy in the factory, and gradually wresting some part of the economic machine from the capitalist.

There are difficulties in the way of a brief survey of Kautsky's position—the volume of his work and the fact that his views have undergone changes. *Social Revolution* (1902), *The Dictatorship of the Proletariat* (1918), and *Terrorism and Communism* (1919), are, however, typical.

As against Bernstein, Kautsky upholds the theory of the destruction of capitalism by catastrophe. He likens the change from capitalism to socialism to birth. At birth we have an entirely new functioning of organs which are the result of slow development: the child's lungs, etc., are of slow growth within the mother, but at birth they take on new and independent functions. Similarly, whilst the social organs develop slowly, their functions can be changed by revolution. A railway takes time to build up, but it can be made to function for the labouring, instead of the capitalist class, by a sudden transformation. One could not change it piecemeal, i.e., by socializing first the engineers, then the clerks, and so on, but only at one stroke, because the various functions are so intimately connected that they must be revolutionized simultaneously.

Kautsky denies that class antagonisms are softening. The new middle classes mentioned by Bernstein, the "intellectuals," have no class consciousness, are sympathetic to socialism in increasing numbers, but they are the least combative of the bourgeoisie, and, as they have no organized force, like the proletariat, can fight only with intellectual weapons. They do not form a barrier to revolution. The small property owners mostly identify themselves with capitalists. While they need democracy to protect their own interests against encroachments by the capitalists, they can maintain their position only by exploitation of the worst kind—they are hit most by labour legislation, and so form a bitter, hostile, reactionary democracy. The increase of their numbers increases class antagonisms. Large farmers are increasingly hostile because socialists secure shorter hours and higher wages for farm labourers. Finally, the capitalist class is more and more hostile. Increased trustification has increased their powers of resistance to the working class, increased international competition is carried on by depressing wages. Most important of all, the antagonism of the capitalist class is increased by the growing control of the financial capitalist over the industrial capitalist. The latter is interested in peace, external and internal; wars and internal disputes disturb trade, and load him with taxes and debt. On the other hand, the great financier is interested in war and militarism, as they give him many opportunities to increase his wealth and power. The development of joint stock

companies, which Bernstein says tends to increase the number of small property owners and so diminish antagonism, actually places the real control into the hands of financiers, thus increasing class hostility.

Nor can it be argued that democracy will enable the transformation from capitalism to socialism to be made gradually. The growth of collectivism would affect the question of revolution, only if it were true that the proletariat were gaining in strength whilst the bourgeoisie remained stationary, thus allowing the workers to overtake and outstrip their opponents. But in fact, the bourgeoisie, like the proletariat, is gaining in strength, and adopting new methods of repression. What appears to be the growth of socialism, is in reality the organization of ever larger fighting bodies, and an extension of the field of battle, which can only end in social catastrophe. The field of co-operatives is limited, trade unions are restricted by statutes, the courts, and the existence of employers' organizations; municipal bodies are hampered by finance, and Parliament is ceasing to be the great driving wheel of progress. None of these things is significant enough to avert a revolution.

Kautsky's views on social catastrophe depend largely on his attitude to historic necessity; and we shall see that not only his position against Bernstein, but his criticism of Lenin, have the same origin. What are the pre-requisites for the establishment of socialism? First, the will to socialism, interest in and desire for it. This is created by great industry. Where small production is uppermost the mass of the people possess the means of production, and those who do not, set as their ideal the acquisition of some, i.e., they uphold private property. With great industry, it is impossible for individual workers to possess the means of production—the immense modern equipments—*except* by sharing its ownership in a social form; that is, they are interested in social property. Secondly, there must be suitable material conditions. It is not easy to organize socially a large number of scattered, independent producers. Socialism is facilitated by the growth of great industry. Thirdly, there must be strength to realize socialism. The numbers of those who want socialism must be larger than those who do not. Great industry develops this factor also—for the numbers of capitalists decrease, while the numbers of the proletariat grow more rapidly than those of any other class. Fourthly, the proletariat must be *mature*, i.e., able to retain hold on, and employ, the means of production. The other three factors arise without proletarian co-operation, through the operation of capitalists who expand industry, but this one demands their help. The greatest aid to the maturity of the proletariat is the class struggle, which promotes self-discipline, independence, and capacity to grasp and use political power.

It is from this point of view that Kautsky comes into conflict with Lenin and the Russian Communists. He points out that Russia is predominantly agricultural, and that the majority of the population

consists not of proletarians interested in social property, but peasants who want more land—private property. In other words, Russia was not "ripe" for a socialist revolution. The Communists have exaggerated the power of human will. "With *will alone* nothing can be achieved. If the movement is to have any success there must be something more than *mere will* and *mere need* . . . the will must confine itself to what is possible" (*Terrorism and Communism,*" p. 93). It is not possible to skip a stage of normal development, but only to shorten the birth pangs. He quotes Marx's words, "In place of a critical examination the minority (the League of Communists) sets up the dogmatic, instead of the materialistic conception of things, the idealistic. Instead of the actual condition of things being the driving force of the revolution, they seek for that driving force in mere will; whereas we say to the workman, 'You will have to go through twenty or fifty years of civil wars and struggles, not merely to change conditions but also to change yourselves, and to make yourselves capable of political government.' He even goes so far as to say that, owing to the unripeness of Russia, the revolution could only be a *middle-class* revolution" (*Dictatorship of the Proletariat,* p. 136). The whole of the course of the Bolshevik revolution is regarded as a proof of this. The peasants supported the revolution, but only on condition of being given a free hand as to land. The Bolsheviks have been driven by the immaturity of the Russian proletariat, to endeavour to cultivate it artificially by means of propaganda, schools, factory and other tribunals. But if the morale is not present before the beginning of socialization, it will be too late to develop it after expropriation; it will not come through preaching, for it is the product of our lives and activities. "It is impossible to leap in one bound from Absolutism to a Socialist Society." It is true that big feudal estates exist no longer; conditions were ripe for this change, but they were not ripe for the destruction of capitalism. A new and harsher capitalism has arisen, with compulsory labour and factory tribunals, and a body of officials with almost absolute authority. The Bolsheviks should establish themselves on the lines of Marxist evolution, which teaches that "natural phases of development cannot be precipitated." The Communists in their struggle against forces which they cannot control, will either fall, or will be compelled to change their policy to fit the actual conditions. (This was written in May, 1919.)

Lenin's writings are as definite and forcible as his acts. A considerable number of his theses and speeches are now available in English. Not all are of equal interest, the most important, from our point of view, being *The Chief Task of Our Times, Soviets at Work, The State and Revolution, The Proletarian Revolution* and *Left Wing Communism.* The resolutions of the Ninth Congress of the Communist Party are also enlightening. In this body of literature one searches almost in vain for discussion of the theory of value; from Marx's works the Communists have selected for emphasis

the theory of history, and its applications, paying special attention to the *Manifesto* of 1848, *Eighteenth Brumaire of Louis Buonaparte*, and *Civil War in France*.

Lenin's attack on Kautsky is concerned with the break-up of the State. The definition of the state agreed upon by Marxians is largely the result of Engels' *Origin of the Family, Property and the State*, where an attempt is made to describe, not the forms, but the essence of the state, and this is found to be class domination. The state arises as soon as society breaks up into classes, it is the product of the irreconcilability of class antagonisms, an organ of class domination. It may be monarchist or republican in form, but is still an instrument of class domination. The state is the state of the most powerful class, and in the modern representative state that class is the capitalist class, which uses it to enforce its exploitation of labour. According to Lenin, the proletarian revolution will do two things : (1) break up the capitalist state (i.e., end the domination of the capitalist) and shatter the capitalist state machine by force ; (2) erect the proletarian state, which is still an organ for oppression, but now of the bourgeoisie by the proletariat. But the proletariat will aim at removing the economic foundation of all oppression, and so, as classes, and with them class oppressions, gradually disappear, the proletarian state will itself " wither away." There will then be no state—no class oppression—but communist society.

Did Marx teach that the capitalist state machine must be broken up? Lenin appears to be justified in his claim that this is pure Marxism. In the " Communist Manifesto of 1848 " Marx declared that the proletariat was compelled to organize as a class, that a revolution would make it the ruling class, and that it would then destroy all classes and so its own class domination. This thought is further developed in *The Eighteenth Brumaire of Louis Buonaparte*, where he argues that after destroying local and special privileges, successive revolutions centralized the power of the state more and more, but only in order to concentrate against it all the revolutionary forces of destruction (Kerr's edition, 1913, pp. 141-143). Marx's study of the Commune of 1871 in *The Civil War in France* (especially Chapter III), makes it clear that the Commune was a working body, in which the legislative functions were not separated from the executive, for the law makers had to carry out their decisions. The members could be recalled at short terms, and were paid workmen's wages. Bureaucracy disappeared, the population were armed, and judges made elective. " It was essentially a working-class government, the product of the struggle of the producing against the appropriating classes. . . . The Commune was to serve as a lever for uprooting the economical foundations upon which rests the existence of classes, and therewith class rule " (Kerr's edition, p. 48). Engels remarks that the working classes cannot govern by means of the old machine, but must sweep it aside, break it up.

An attack of this kind involves, for a period, dictatorship and the supersession of democracy. The aim is the forcible uprooting of the whole class system, and this is to be done through the dictatorship of the proletariat, that is, the organization of the advance guard of the oppressed classes as the ruling class (see *Proletarian Revolution*). A minority of oppressors is excluded from democracy in order that their power may be broken. This change is really an advance, for the mass, the proletariat, now rules instead of a minority, the bourgeoisie. For in formal democracy the equality is in name only. Residential and other franchise " qualifications," the practical restrictions on the right of public meeting because of the ownership of meeting halls, the capitalist ownership of the press, the difficulty which tired workers find in taking an active interest in politics—all these restrictions, slight in themselves, have as their cumulative effect the thrusting out of the poor from an active share in democracy. The only way to meet this situation is to break up the resistance of the capitalist classes by force, by depriving them of political rights, seizing and suppressing their newspapers, and the like.

Lenin claims that this doctrine also is pure Marxism, and there is plenty of ground for this belief. The Communist *Manifesto* speaks of it, though without using the precise phrase. This occurs, Beer shows (in *Life and Teaching of Karl Marx*), in 1852, when in a letter he claims that the class struggle leads necessarily to the dictatorship of the proletariat during a transition period, while in 1875 he again speaks of a transition period, " the state of which can be nothing else than the revolutionary dictatorship of the proletariat." Kautsky draws a distinction between dictatorship, as a political condition, a state of things, and a form of government. Marx, he claims, meant the former ; for when the proletariat should have captured political power—democracy, the proletarians would be a majority, and therefore, in fact, dictating. He denies that Marx had in mind dictatorship as a form of government, above the law, involving the denial of political rights and equality to certain classes. One reason why he should do so was clear in 1902 (*Social Revolution*). He there asks what the first acts of triumphant social democracy would be, and he replies that it would " realize that democratic programme for which the bourgeoisie once stood "—universal suffrage, complete freedom of the press, abolition of all rights of inheritance, and the destruction of militarism. We can see why the first acts of the Bolsheviks roused his opposition. For he not only regarded democracy as necessary to the " maturing " of the proletariat—their education—but both socialism and democracy not as ends in themselves, but means to an end, the abolition of every form of oppression, whether it were directed against a class, a sex, or a race.

The position of the Communists with regard to economic determinism is clearly shown by their defiance of the stricter view of Marxist evolution. It has, however, a theoretical background. The real difficulty of the change from Capitalism to Communism lies in

the fact that people reared in a capitalist system have " capitalist minds " ; from birth they have received its morality, in order to live they have had to act according to capitalist standards of values. But Communism, the realization of the formula, " from each according to his abilities, to each according to his needs," is possible only as people " become accustomed to observe the fundamental principles of social life " (Lenin). The effects of this environment cannot be removed by a steady process of education, since the capitalists will not allow the educational machine to be used for anti-capitalist purposes. If, however, a group of men—" the advance guard of the proletariat "—by force seize political power, they can break through the environment at many points. For instance, they can undermine the peasants' faith in private ownership. All over the country can be scattered State farms, collectively worked under the guidance of experts. They can be made seed distributing centres. The peasants around will come for seed, will observe that the workers on the farms are better fed and clothed than they are, that the crops are better than ever they could hope to raise, yet without private ownership. So their objections to socialization of land will disappear. "We believe that can best be done by the collective working of the land, but we are not carrying through any forcible socialization of the land, we are not forcing any individual producer to enter any collective form of production. . . . We believe that the collective producer can only be valuable provided he has become convinced of the advantages of the collective process of production, and enters it consciously and willingly." (Commissary of Agriculture to Mr. Goode, *Bolshevism at Work*, p. 46.)

The Communists admit, however, that conditions necessitate a period in which full Communism cannot be realized ; for at first the new society will not have developed on its own foundations, but have just issued from capitalist society, and must therefore bear its economic, moral and intellectual stamp. In this first phase of Communist society exploitation will be impossible, as the means of production are now socially owned, but inequalities will still exist ; people will be paid according to the quantity of labour they perform, instead of according to their needs. The latter will be possible only when people have become accustomed to observe the fundamental principles of social life, to work according to their abilities. " Bourgeois exploitation " will be abolished, but some " bourgeois injustice " will remain.

The economics of Marx needs a few words of explanation, and these concern Marx's *method*. (1) Marx assumes, as many other economists have done, a capitalist system of free competition—free from the disturbing influences of monopolies and trade unions. The capitalist system so described does not actually exist, but he believed that West European States approximated to it. (2) The theory of value (that the value of commodities is determined by the amount of socially necessary labour embodied in them) and surplus value, are

abstract conceptions not actually found in the facts. Beer explains this by saying that "Marx regarded the scientifically discovered principles as the real inner being of things, practice he regarded as the superficial appearance of things, capable of being apprehended empirically; for example, Value is the theoretical expression, Price the empirical; Surplus Value is the theoretical, and Profit the empirical expression; the appearances apprehended by experience (Price and Profit) deviate, indeed, from theory, but without theory they cannot be understood." But one need not go to philosophy for an explanation, for Marx himself gives us the clue to his method in Chapter I, Section 4, of the first volume of *Capital*. This makes it clear that he was using his theory of value as a method of investigation. Robinson Crusoe on his island decides to produce certain things, and it is possible for him to make a list of the things in order of their value, i.e., the labour time they have cost him, or the portion of the whole time he spent in working which was occupied in making them (*Capital*, Vol. I, 1908 edition, p. 48). In a feudal society the transactions between serf and lord took the form of payments in kind and service; but the serf knew that he paid the lord a definite quantity of labour power, and measured it as two or more days' work a week and so on. That is, the social relationship between individuals in performance of their labour appears as a relationship measured by labour time (p. 49). Again, in a community of free individuals, carrying on their work with means of production owned in common, in which the labour power of all the different individuals is consciously applied, as the combined labour power of the community, i.e., a society regarded simply as a working society, we have a position similar to that of Robinson Crusoe, except that the product is socially owned. In this imaginary society the sum total of "value" of all the products is the sum total of the labour of all the private individuals, the aggregate labour of society; and a scale of commodities could be drawn up according to their value—the labour time required to produce them (p. 50). Marx argues that the relations between people in such a society, where we are thinking of them simply as people who work, and in actual states of society primitive enough to be akin to it, appear also in capitalist society, but are there disguised and thwarted. When the articles produced are commodities—when they are exchanged, the labour of the individual asserts itself as part of the labour of society, only by means of the relations which the act of exchange establishes directly between the products, and indirectly between the producers. To the latter, the relations connecting the labour of one individual and the rest appear, not as direct social relations between individuals at work, but as social relations between things. It is these disguises, these deviations, which Marx studied. Engels held that the Marxian law of value had predominated for 5,000 to 6,000 years, from the beginning of the exchanging of products as commodities (e.g., Babylon) up to the era of capitalist production. This fact,

that Marx uses his theory of value as a means of investigation, is sufficient to rebut many of the common objections brought against his theory on the assumption that it was a theory of prices, and to render invalid many defences made on the same understanding. Although Marx is thus formally justified in using the method, it must be condemned on practical grounds. Any method which so misleads critics and followers is bad. This explanation of the theory of value is held wholly or in part by such divergent writers as Croce (*Historical Materialism*), Beer and Bernstein.

A conclusion may be drawn from this controversy which is of importance to economic history. To me, History, Pure Narrative, is simply man's memory of his past, of things thought, said, and done. But histories may be written in many ways. We may write idealistic history, the story of man's efforts as related to the various political or other ideals he has tried to realize ; we may trace human progress in connection with advances in natural science; or we may view history in the light of some general idea, like personal freedom, and write our history with this as its theme. We can, if we like, select some definite body of fact for special treatment, and so obtain constitutional or economic history. But none of these are History, Pure Narrative, in the sense in which I have defined it, for they have two characteristics—they are at once abstract and practical. They are abstract because they isolate particular groups of facts for study. They are practical because the choice of the group of facts is the result of personal interest, the pressure of contemporary problems, and so on. They are not Pure Narrative, the developing whole, but ignore some factors present in actuality, assume some fixed which are changing, and when the particular study is put into its full background, the conclusions have to undergo modification. Economic history is of this kind, and it must, therefore, be justified on practical grounds. While the usefulness of the study of industry and its development, etc., is obvious, are not economic historians open to the charge of concentrating too much on this body of facts, and neglecting the relation between that body of facts and all the other facts which make up the whole ?—of passing on one side the relations between changes in economic conditions and changes in morality, law, philosophy—the whole culture of society ? Marx has asserted the interdependence of all these factors, and has done this by attempting to show their common dependence on economic conditions. This broader problem, the new material to which Marx drew attention, has not been adequately investigated, and it seems a work which economic historians could well undertake. The reason for this plea for a shifting of attention is that, to me, the dominant facts to-day are, the economic breakdown of Europe, the developing class struggles, the rapid change of political and social forms, and the battle of social, moral and political standards for control over the reorganization. Of coures, the study of previous changes will not provide historical parallels

of practical value, for every fresh situation is also *unique*. But we can be helped—to borrow a phrase from the biologist—by a recapitulation of the history of the race in economic breakdown and class conflict.

The Trade Depression following the Napoleonic Wars

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"It was reserved for Peace to bring forth the fruits of War."
—Thoughts on the Present Crisis (1816). Peter.

It has been said that history never repeats itself. Interpreted literally this statement is, of course, a truism ; but if it be taken to mean that history teaches no lessons because at different periods similar causes produce dissimilar effects, then it is not merely untrue but dangerously untrue. No more striking illustration of history repeating itself in the broad sense of the phrase can be found than the comparison of the aftermath of war in the years following 1815, and that of the present time. In spite of very dissimilar economic, social and political environments, the present course of events is closely following that of the earlier period. So much is this the case that a student conversant with the earlier period often has an uncanny feeling of having previously lived through current events. Currency difficulties, trade depression, unemployment, strikes against wage reductions ; class bitterness, with sullen resentment on the one side and fear of revolution on the other; disillusionment and unrest—our ancestors experienced all these things. No outstanding genius arose able to open up a short way back to prosperity, but slowly a much tried generation overcame its difficulties and bequeathed to its children the smug prosperity of the latter nineteenth century.

In this paper the writer only proposes to deal with the trade depression of the period and with some of its causes and results.

If the impression conveyed by a cursory study of the trade and other statistics of the period 1815-30 could be summed up in one word, that word would be Stagnation. The revenue was stagnant, the yield of Customs and Excise was stagnant, and all available statistics of trade and consumption tell the same tale.[1] A more careful study, however, reveals considerable fluctuation in conditions from year to year, which fluctuation it appears worth while to examine in some detail.

In dealing with this period the predominant importance of the harvest must always be remembered. Not only was one-third of the population engaged in agriculture and therefore directly affected, but foreign trade was very small relative to that of the present day, and therefore the demand for manufactured goods depended largely

[1] See Tables II, III, in particular.

upon the prosperity of those drawing their income from the land, whether in the form of rent, profits, or wages. The bulk of the food supplies were home grown and therefore the mass of the population were gravely affected by the harvest and its effect on the price of provisions, especially upon that of bread. Our climate being as uncertain then as now, the harvests were extremely uncertain in quantity and quality, and the price of bread fluctuated widely in consequence. This fluctuation was increased, as is well-known, by the operation of the Corn Laws and, apart from those laws, by the fact that import, in appreciable quantities, was at that period only possible from countries where weather conditions tended to vary with our own. A study of Tooke seems also to reveal the fact that the organization of the corn trade was still very primitive, for not only were natural mistakes made in forecasting harvest yields, but very erroneous estimates often appear to have been made in regard to the stocks in hand.

Apart from the fluctuations in the price of corn, which fluctuations were, of course, much greater than those shown by the annual averages, it remained high in comparison with other prices (Table XI). The probable cause of this was the growth of population coupled with improved methods in the more important industries, especially iron and cotton (see Table I). This relatively high level of the price of food added greatly to the general sufferings, and the high price of provisions was probably a more potent cause of discontent than even unemployment and low wages. In passing to a detailed study of the period it is well to remember the elementary, but frequently forgotten, fact that the harvest takes place in the autumn.

The proclamation of Peace was the occasion of high hopes of prosperity among all classes except, perhaps, farmers and land owners. A large European demand was anticipated, both for Colonial and British manufactured goods, and huge quantities of these were rushed to the Continent. But the Continent was exhausted and purchases were few. At the same time the important woollen and iron industries in all their branches suffered most severely from the cessation of the Government demand. The consequent unemployment was added to by the rapid demobilization of the army and navy. Agricultural prices fell owing to the cessation of government purchases and also to a good harvest. The country banks took alarm and restricted credit to the great embarrassment of those farming on credit and of land speculators. The whole position is well summed up in a speech made by Brougham in a debate on the distressed state of agriculture on April 9th, 1816.

He said that the great amount of distress was generally recognized: a petition from Cambridge stated the case of a whole parish being paupers with one exception.

The excess of cultivation was one cause of the distress. The war caused England's supremacy in commerce and colonies and

this stimulated manufactures and agriculture. The period 1797-1808 was one of great extension of cultivation and the scarcities of the last years of the century encouraged cultivation. To this was added the stimulus of the war demand. More was spent on food for armies than would be spent by individuals.

But the chief evil of war was its effect on currency. The alarm of the stoppage of 1797 soon subsided. The Bank of England increased its issue, but also there was a great increase in country banks.

This fact, that Bank of England notes only were legal tender, was no real check on the country banks since people often preferred local notes to Bank of England notes.

Unlimited accommodation was given to farmers and land speculators. The banks assisted all adventures, but mostly land adventures, since these were supposed to be safe. In consequence there was over-trading in agriculture. The improved methods were common knowledge and were accompanied by inclosure of commons, village greens and wayside swards. Added to the new skill in husbandry were the abundant harvests of 1812-13-14.

The declaration of Peace, however, was one cause of the fall of prices, mainly owing to the cessation of the war demand.

The distress of the commercial world also affected agriculture.

When, in 1814, restriction of trade was abolished, a sudden rage of speculation arose, clerks, menials and labourers engaged their earnings in enterprise and the Continent was flooded with English goods and there were consequent failures.

The Peace with America produced somewhat similar results. But America will ultimately pay and the glut worth while there to stifle U.S. manufactures, many of which had been forced into existence by war, contrary to natural order.

Now arose the chief cause of distress. The Bank of England rapidly limited discounts and diminished the paper issue by £3,000,000. The country banks acted more sweepingly; "a single failure would stop all such transactions over a whole district, and I could mention one large stoppage which made it difficult for a length of time to discount a bill anywhere in three or four counties."

Speculators in land felt this most, since property is not easily converted into money. The fall in production made it difficult to pay interest, and then the borrowers were called upon for the capital with the result that the lender finds himself with title deeds which he cannot sell.[1]

In Committee of Supply, February 12th, 1816, Mr. F. Lewis stated that farmers were paying taxes out of capital. The change from war to peace was partly the cause of the agricultural distress, but it was also due to the withdrawal of capital from circulation.

"Prices fell because they were expected to fall; bankers stopped their usual advances, and drovers, hucksters and all petty chapmen

[1] Hansard.

who frequented markets and traded solely on the strength of these advances were checked in their bargains." [1]

In 1816 there was a disastrous harvest all over Europe. The price of all provisions rose while the prices of all other commodities continued to fall. The same conditions prevailed in the early part of 1817. The *Annual Register* for 1817, says: "This year commenced with distress spread through the greatest part of Europe in consequence of the late unproductive harvest of the late autumn."

Famine prices added to the sufferings due to the stagnation of industry.[2] Appalling distress prevailed in 1816-7. In evidence given before the Committee on Police of 1816, it was estimated that from 20,000 to 30,000 of the London silk weavers, including men, women, and children, were out of employment.

In the Ordnance Supplementary Estimates presented on April 8th, 1816, it was stated that a charge of £100,000 on account of supply of small arms was occasioned by an agreement of the Government with the manufacturers of Birmingham to take a certain quantity of small arms for three years to prevent danger which would be produced if, in consequence of cessation of a demand for muskets, they would be obliged to dismiss on a sudden the great body of workmen they had so long employed. Next year this agreement would cost £50,000 and after the ensuing year would cease.[3]

Evidence of the conditions could be multiplied, but the best summary is perhaps to be found embodied in the Watchmakers' Petition, July, 1817.

A Mr. Jeffreys said that he had done a country trade for twenty years from Dover to Penzance. He used to sell 4,000 to 5,000 watches annually, but since the peace his sales were reduced to 1,000-1,200. He ascribed this to the general distress; the middle and lower classes were selling and pawning watches and plate, even to the wife's wedding ring, to maintain themselves.

An average workman in the watch-making industry used to earn 1½ to 2 guineas per week, now he earned only about 12s. Similar evidence was given by others.

A Mr. George Clerke, a manufacturer of Coventry, stated that in 1814 he sold 2,991 watches, in 1815 he sold 3,380 (American market opened), in 1816 he sold 2,486, and during the last six months he had sold only 793.

He further stated that finishers used to earn 24s. to 40s., but now earned only 12s. to 21s.

There was a falling-off in the regular American trade, and he read an extract of a letter from U.S.A. "The interior of our country is too much impoverished to pay their balances in due season, the great influx of goods in the interior has reduced the price to one under cost. Should the specie arrive from your country for our

[1] Hansard. [2] See Table XI. [3] Hansard.

national bank the general impression is that it will restore confidence and give a stir to trade." And also from a letter from Germany, saying "that from the great dearth of last season the people have no money to buy watches."

W. Grimshaw, Secretary to Committee for Relief of Distressed Workmen, gave evidence of the terrible distress due to unemployment and low wages among London watch-makers, many earning from 9s. to 14s. per week who formerly earned at least 30s. This was due to the general depression ("a watch is put off in times of distress"), also since the peace there had been the competition of French watches.

Mr. W. Webb, another secretary, said many men, formerly householders, were now living on 3s. or 4s. per week and would have died of hunger without charity or the poor law.

Incorporated in the report is a letter to Mr. Peter Moore from a Mr. Samuel Smith, describing the distress in different towns. (The date of this letter is not clear but it must be between October, 1816, and April, 1817.)

Birmingham.—"The distress . . . extremely great, not less than 12,000 to 15,000 men on two to three days' work per week and hundreds flocking every week for relief and the best of the merchants having their bills returned."

Walsall, Wednesbury, Tipton, Dudley, Wolverhampton.—"These places . . . under one head . . . all being in the iron trade, about 12,000 of the people out of employment, is impossible to conceive the great distress which prevails in these towns."

Stafford, Stone, Newcastle, Burslem and *Henley.*—"The distress in these places is not quite so great as the before mentioned, but living is getting much more difficult every day and no cash to be got, is the general opinion. I know it perfectly well by experience. In Stafford there are about 300 to 400 persons entirely out of employment and in the other places on three days per week."

Completon, Leek, Macclesfield.—"The distress in these towns is now getting very great, the buying being much fallen off and hundreds out of employment and numbers going daily for relief."

Stockport, Manchester.—"These two towns, from the best information I could collect, about 23,000 people were out of employment and in many instances under the necessity of getting money on interest to relieve the great distress of the poor."

Nottingham, Loughborough, Hinckley, Leicester.—"These places on an average calculate not less than 12,000 people wanting employment . . ., they are literally starving."

Broomsgrove, Worcester, Tewkesbury, Gloucester, Tedley.—"In these places trade never was so indifferent as at the present, there was never such a number of people out of employment, nor the poor rates so great as they are now (with the exception of Worcester, that has revived lately, they having had a few orders)."

Newent, Ledbury, Ross.—" These places are rather better than the former, it being a farming district the people not depending upon trade only, but money is scarce here as at the other places."

Coleford, Monmouth, Chepstow.—" The trades in these areas is extremely indifferent as they chiefly depend on the iron and coal trade, the ironworks being all stopped and the coalworks in the Forest of Dean part stopped and a great decline in the ship building at Chepstow . . . from the best information I could get, not less than 1,000 men are wanting employment. I have seen twenty at a time and frequently twelve in a gang begging."

Bristol.—" This town, I think, better in many respects than most towns I have been in, there being but little manufacturing, only for the shipping business and that has declined rather materially and numbers wanting employment but not to any great extent, but the people very short of cash and cannot buy goods. . . . I have sold goods to the amount of £1,000 in this town, this time not to the amount of 1s."

There is a terrible account of the Welsh iron and coal district. " I saw a dozen in a gang begging for a morsel of bread, and these are the men that once bought and wore watches and now they are almost naked."

Coventry.—" Nearly all workmen in watches trade are either in poorhouse or having relief from the parish and two or three days' work per week . . . there appears nothing but distress all over the country. I am receiving letters every day of persons compounding for 4s., 5s., 6s., and 10s. in the £ at 18 months . . . numbers are totally gone off and another class cannot pay."

With such an industrial situation it is not surprising that rioting and sedition prevailed. Order was maintained with difficulty, the Habeas Corpus Act was suspended and there were numerous prosecutions for high treason.

At the end of 1817 and in 1818, there was a delusive revival of trade and the authorities anticipated internal peace. But in June a strike broke out among the cotton spinners which soon spread to the weavers and which lasted ten weeks. At the same time there was a shorter coal miners' strike. The cotton operatives were supported by subscriptions collected all over the country—a feature of the situation which much alarmed the Government. With the return of trade depression the industrial weapon of the strike was discarded for political agitation.

Tooke ascribes the delusive revival to the fact that, during the depression, stocks of raw materials and manufactures had been allowed to fall very low owing to falling markets. The necessary renewals and fears of a bad harvest led to the anticipation of rising prices and to consequent speculation. He quotes the following in support of his statement.

IMPORTS IN GREAT BRITAIN.

Years.	Silk. Million lb.	Wool. Million lb.	Cotton. Million lb.	Hemp. Thousand tons.	Sugar (*less* rebate) £ mil. official value.[1]
1816	1·1	8·1	93·9	18	11·3
1817	1·2	14·7	124·9	23	17·7
1818	2·1	26·4	177·3	33	23·0

Stocks were increased to a greater extent than conditions warranted, and the *Annual Register* for 1819 states that " Pecuniary distress has been nearly universal, the agricultural, the commercial and the manufacturing interests have all laboured under a depression and embarrassment seldom equalled." Political agitation was rife and to this year belong the Five Acts and Peterloo.

1820 was blessed with a record harvest. It was estimated at one-third above the average and it was not completely consumed for two or three years. The prices of commodities other than corn also continued to decline until the close of 1822 when rumours of war caused a temporary rise.[2]

During 1820-21 farming continued to be " a depressed industry," and the iron trade was in a similar condition. But in the same period the woollen and cotton manufactures were improving and employment in those industries was good.

In 1823 the *Annual Register* reports that every branch of manufacturing industry was in a flourishing state, largely owing to increased exportation.

" In all great branches of trade there prevailed in the latter part of 1823 and the greater part of 1824, a general character of prudence and sobriety . . . the trade and manufactures of the country had never been in a more regular, sound, and satisfactory state . . . than from 1821-24."

A shortage of supply was foreseen in 1824, and reports of a shortage of various raw material crops started a rise of price which became cumulative. Cotton was particularly affected. But the main cause of the rise was speculation in anticipation of the opening up of the South American market through the recognition by the British Government of the new republics. This speculation was mainly in connection with mines.

The *Annual Register* for 1824 states that: " No country ever displayed a spectacle of so much industry, wealth and commercial enterprise as England now presents." In 1824, " even the country gentlemen . . . could no longer complain." The boom was in full swing. There was a great outburst of joint stock enterprise in which all sorts and conditions of men and women ventured their savings. The boom in foreign investment was ascribed by some authorities to the fall in the rate of interest.[3]

[1] See note to Table II. [2] Tooke.

[3] In 1822, the 5 per cents. were reduced to 4 per cent.; in 1824, old 4 per cents. were reduced to 3½ per cent.; in 1822, Bank Rate reduced from 5 per cent. to 4 per cent.

The harvest of 1823 had not been very good, the same was true of that of 1824; in 1825, however, there was a good harvest, but on the announcement that wheat in bond would not be released, wheat rose in April, 1826, to 60s. The manufacturing population were now suffering from the trade depression and there was a loud outcry for the release of wheat in bond. The outcry was successful and the release of bonded wheat coupled with an early harvest kept down the price. Other crops, however, were not so favourable. In the early part of 1825, "nearly all property had risen greatly in pecuniary value and every branch of internal industry was thriving. Agricultural distress had disappeared, the persons employed in the cotton and woollen manufactures were in full employment, the various departments of the iron trade were flourishing, on all sides new buildings were in course of erection."[1]

But by the end of the year stringency in the money market became evident, and on December 5th the stoppage of a well-known banking house (Sir Peter Pole and Co.) led to a financial panic, since this house was known to be banker to forty-four other banks. The panic was severe, many banks failed and £1 and £2 Bank of England notes were temporarily issued for country circulation. The panic was followed by a severe trade depression with accompanying unemployment. Shipping was particularly depressed. With the exception of anti-machinery riots in Lancashire, however, the *Annual Register* reports "that there was no spirit of discontent nor any tendency to disturb the public peace. The lower classes, in particular, bore their sufferings with a quietness and resignation which ensured universal sympathy; in every quarter of the empire liberal subscriptions were cheerfully made to alleviate the distress of the poor." The relatively low price of wheat was probably an important factor in this quietness. Perhaps, too, the mass of the people were disillusioned by the ineffectiveness of previous agitation and so tended to be acquiescent. The leaders had an outlet in the legalized Trade Union movement and in the various constitutional agitations for political reform.

In 1827 there was a full average harvest, but it was not until 1828 that the *Annual Register* reported that "the monied and manufacturing interests were rallying from the confusion of the preceding 18 months, there were no longer any failures of banks. Employment was now furnished to the artisan in his ordinary calling so generally as to be almost universal, and although wages were still low they enabled him to gain a livelihood . . . the associations which had been formed in all the manufacturing districts to collect and distribute charitable contributions were enabled to put an end to their humane occupations."

In his summary of the period 1828-32, Tooke says, "The price of provisions underwent very considerable variations, but for the most part at a relatively high range, the trade and manufactures of the

[1] *Annual Register.*

country, although proceeding in progressive extension, were, for the most part, undisturbed by any great fluctuations, the general tendency being towards a fall of prices." The harvests of 1828-29-30 were deficient though the deficiency was to a great extent met by imports. Prices were fluctuating owing to the uncertainty of the harvest and of imports.

Most raw materials fell in price. Tooke ascribes this to increased production, and in manufacturing part of the fall is ascribed to the increasing use and efficiency of machinery.

In spite of all the difficulties of the post-war period there was a considerable amount of foreign investment. In the Statistical Illustrations of the British Empire quoted by Mr. C. K. Hobson,[1] it is estimated that the total money advanced by England to the South American States was £49,000,000. Almost all of this money, according to Mr. Hobson, was lost with the exception of the Buenos Ayres Loan upon which all arrears were paid after thirty years.

In addition it was estimated that between 1815-25, £36,000,000 was lent to France, £9,000,000 to the United States and £10,000,000 to Russia. Upon all these interest was duly paid.

"Further, in 1824-25 there were forty-one foreign and other trading ventures set up with nominal capitals to the amount of £32,840,000 on account of which upwards of £3,000,000 was actually paid."[2]

This makes a total of £108,000,000, a surprising one for that period and for an exhausted country.

From another source the following list of Bubbles is taken :

Payments %		£
35	in £1,000,000 Brazilian Loan, 1824	350,000
75	,, £2,000,000 ,, ,, 1825	1,500,000
75	,, £3,000,000 Danish ,, ...	2,625,000
56½	,, £2,000,000 Greek ,, ...	1,130,000
25	,, £1,428,571 Guatemala ,, ...	357,143
60	,, £400,000 Guadalyan ,, ...	240,000
89¾	,, £3,200,000 Mexican ,, ...	2,872,000
70	,, £2,500,000 Neapolitan ,, ...	1,750,000
78	,, £616,000 Peruvian ,, ...	480,480
		£11,304,623
Total : Home and Foreign		£17,582,773

"Very little of the £17,000,000 was sent abroad. You can hardly imagine the extent of the roguery. Not one shilling was sent to Peru. Of the Chili Loan . . . all that Chili received was about £100,000."[3]

In a "List of Companies promoted 1824-25," the total *nominal* capital is given as £174,114,050.

The amount of investment is less surprising, however, when we

[1] *The Export of Capital.* C. K. Hobson. [2] *Ibid.*
[3] *Elementary Propositions on Currency,* 1826, Henry Drummond.

find that during the ten years 1806-15 the British Government took from the public in loans and taxation over £1,000,000,000, while the corresponding figure for the period 1816-25 is only £700,000,000. The earlier period was also one when a great deal of capital was sunk in canals, turnpikes and in developing certain industries, but above all, in the land. Agricultural improvement largely ceased in the latter period, therefore, even after allowing for the depression of trade and the fall of prices, there remained a considerable surplus for investment in commercial and industrial ventures, particularly in those organized on joint stock lines. The long war and the large Government borrowings had created a new class—the Fund holders. In earlier periods the successful merchant used his surplus to enlarge his business or bought land and became a country gentleman. But the changes in agriculture made estate owning more strenuous. There was a great speculative movement in land and numerous amalgamations of estates. Estate owning became a business, and the comfortable retired class, instead of buying an estate, built a small country house or suburban villa with pleasure grounds only, and put the rest of their money in the Funds. This class is familiar to us from Jane Austen's novels.

Besides which the more active members of the propertied class, landowners, merchants and manufacturers, formed the habit of investing a part of their resources in Government securities. The Fund holders benefited from the falling prices; the system of taxation tended to favour them at the expense of other classes, they, therefore, continued to have a substantial surplus to invest. They were naturally uninstructed in the pitfalls of investment and the existence of bubbles was not surprising. Yet much useful development was achieved at home by joint stock enterprise, for example, in the development of the new industry of gas making, while the loans to the Continental Governments helped to put Europe on her feet again. The South American ventures were, as has been pointed out above, less fortunate. Cotton was necessarily the industry most affected by foreign investment, since its place was so predominant in the export trade (see Table IV). The effect of the 1824-25 boom in South American investment on the cotton trade is striking (see Tables V and VI).

The investing class was a very small portion of the community, and that their prosperity was not shared by their fellow citizens is evident not only from all available descriptive matter but also from statistics.[1] The stationary or very slowly rising consumption is more remarkable when it is remembered that the population was increasing.[2] The compilers of the Statistical Illustrations of the British Empire, who, it is true, do not err on the side of cheerfulness, say on this point, "Without fear of refutation it may . . . be

[1] See Table VII, in particular, showing the consumption of sugar and other commodities.

[2] In 1811 the population of Great Britain was 12·6 million, it had risen to 14·3 million in 1821 and to 16·6 in 1831.

stated . . . that the whole range of history furnishes no example of distress and misery so extensive, general and severe, as that experienced by the people of the United Kingdom of Great Britain and Ireland with but little intermission from the period of 1816 to 1822."

It is not difficult to account for the long stagnation. The country was exhausted by a colossal struggle. The heavy burden of taxation could not be lightened ; the debt charges absorbed half the national revenue and the military and civil expenditure included a large proportion of fixed charges. National expenditure, therefore, diminished little with the falling prices, while the real burden on the taxpayer was increased. The ratepayers were in a similar plight. Poor relief, again, in spite of falling prices, continued a disastrous burden. As has been seen, provisions fell less in price than other commodities, and the recurring periods of widespread unemployment added to the expenditure. It was estimated that the total burden of taxation, including poor rate and tithe, was 28 per cent. of the national income.[1]

To the burden of debt was added the dislocation due to currency difficulties. The controversy as to whether rising prices were a cause or an effect of currency inflation, and as to the correct deflation policy, raged as fiercely then as now. It is not possible to discuss it here, but currency adjustments were undoubtedly a most important factor in the economic situation in the early years of peace.

Immediately after the peace, the cessation of the war demand, as has been seen, caused dislocation and unemployment on a vast scale. The dislocation was added to by an overestimate of the peace demand, and a consequent reaction. The peace demand was now underestimated, largely because dealers refrained from buying on a falling market. When at last the demand of the ultimate consumer had to be met and buying started, the reaction on prices was interpreted as meaning an end to the stagnation of trade and buying on too great a scale took place. The whole weary circle was again traversed (1817-19), the difficulties being added to by the revolutions in South America.

With regard to the illusive hopes of 1817-18, Lowe,[2] writing in 1822, says : " The embarrassment which took place after the close of the war was accounted temporary, and the public, unwilling to connect the idea of distress with results so gratifying in a political view, clung to the expectation that their distress would disappear as soon as peace should be firmly established. This hope was confirmed by the revival of our national industry in 1817 and 1818, but the succeeding years dispelled the illusion, and taught us that the evils of transition were not yet at an end.

"During the last and present year, circumstances have become more favourable, and our lower orders, in particular, enjoy a larger

[1] *Present State of England*, Lowe, 1822. See also Tables VIII and IX.
[2] *Ibid.*

share of comfort than they have known for a long period; but the unfortunate coincidence between that comfort and the distress of our agriculturists, joined to the portion of uncertainty always attached to a commerce of export, convey a warning that a season of difficulty must yet elapse ere our circumstances become thoroughly adapted to our new and more natural state. The whole affords a painful lesson how little either the public or our rulers foresaw the consequences of lavish expenditure, and how few among those who undertook to enlighten them, either in parliament or through the medium of the press, had made an acquaintance with historical truths the basis of their conclusions."

It seems likely that the early 'twenties witnessed the beginning of a real revival, but it was disastrously overestimated, both by dealers and investors, with the resulting crisis of 1826, and the subsequent depression.

That a real recovery had begun in the 'twenties was the opinion of the reader of a paper before the Statistical Society of London in 1833. An abstract of some of his more important figures is given in Table X. The trade and other statistics quoted in the other tables point in the same direction. Owing to the colossal burden left by the war, recovery was bound to be slow, but it seems probable that one cause of its long delay was the repeated heraldings of false dawns followed by periods of too profound pessimism.

Will history repeat itself?

TABLE I.

Year.	General Valuations		Oriental Produce.		Tropical Food.		Copper, Lead, Tin, Iron.		Iron, Several Varieties.		Timber.		Fibres, Cotton, Wool, Silk. Flax.		Cotton, Several Varieties.		Corn, Wheat, Barley, Oats, Rye, Beans, Peas.		Wheat *Gazette Average.*		Fodder, Hay, Cloves, Straw.	
	Gold St.	Paper St.	Actual.	Comparative.	Actual.	Comparative.	Actual.	Comparative.	Actual.	Comparative.	Actual.	Comparative.	Actual.	Comparative.	Actual.	Comparative.	Actual.	Comparative.	Actual.	Comparative.	Actual.	Comparative.
1782	100	—	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
1801	140	153	80	57	73	52	139	99	139	99	167	119	142	101	114	81	232	165	222	159	244	174
1812	121	148	66	55	58	48	118	98	88	73	306	254	147	122	70	58	221	183	209	173	203	169
1813	115	149	68	59	67	59	111	97	81	71	185	161	134	117	83	72	197	172	172	150	182	159
1814	114	153	90	78	84	73	113	99	77	68	197	172	131	114	111	97	123	108	113	99	167	146
1815	109	132	82	75	77	71	115	105	81	74	161	148	138	126	94	86	114	104	111	101	166	152
1816	91	109	68	75	63	69	96	105	71	78	116	127	106	116	87	96	123	135	132	146	222	244
1817	117	120	81	69	77	66	107	92	78	67	115	99	140	120	110	94	192	165	191	164	224	192
1818	132	135	90	69	92	70	119	91	98	75	134	112	161	122	106	80	203	155	170	129	252	192
1819	112	117	74	66	73	65	113	101	104	93	138	124	118	105	67	60	177	159	144	129	254	228
1820	103	106	65	63	67	65	106	103	95	92	113	110	121	117	61	60	148	144	134	130	171	166
1821	94	—	68	72	63	66	101	107	82	87	116	123	112	119	53	56	116	123	114	121	182	193
1822	88	—	67	76	61	70	100	113	74	83	101	115	110	125	47	53	92	105	90	102	170	193
1823	89	—	65	73	62	70	107	121	78	88	137	155	115	129	46	52	125	140	108	122	215	243
1824	88	—	61	69	52	58	108	123	94	106	126	143	103	116	48	54	147	167	130	147	250	283
1825	103	—	80	78	65	63	123	119	114	110	133	129	121	117	63	61	157	152	139	135	—	—
1826	90	—	56	62	55	61	111	124	100	111	107	119	86	96	40	45	152	169	119	132	—	—
1827	90	—	58	64	54	60	103	114	86	96	95	105	86	95	38	42	155	171	119	131	245	271
1828	81	—	53	65	48	60	95	117	80	98	93	115	83	102	34	42	136	168	123	151	197	243
1829	79	—	51	64	49	62	89	113	72	91	101	128	76	95	41	39	135	171	134	169	180	228
1830	81	—	52	64	47	59	81	100	66	82	98	121	78	96	36	45	138	171	130	162	220	274

Investigations in Currency and Finance. Jevons.

TABLE II.

1898, LXXXV, p.51 Real Value of Exports of Produce and Manufacture of U.K.		*Acts and Papers*, 1846, XLIV. Official Value, G.B. (ex. Ireland).		U.K. Accounts, etc., 1868-9, XXXV.	
Year.	£ mil.	Imports.	Exports.	Customs.	Excise.[1]
1812	41·7	37·9	24·9	13·0	27·8
1813	no records	records	destroyed	13·9	25·8
1814	45·5	52·3	32·6	14·3	27·4
1815	51·6	57·4	31·8	14·8	29·4
1816	41·6	48·2	26·3	14·2	29·5
1817	41·8	49·5	29·9	11·8	26·6
1818	46·5	52·7	35·8	13·3	23·1
1819	35·2	42·8	29·6	13·8	26·3
1820	36·4	48·3	31·5	12·9	26·5
1821	36·6	50·7	29·7	11·8	29·6
1822	37·0	52·7	29·4	12·7	29·8
1823	35·3	51·7	34·5	12·9	29·0
1824	38·4	58·2	36·0	13·8	27·0
1825	38·9	55·6	42·6	13·5	28·4
1826	31·5	50·3	36·1	18·7	22·5
1827	37·2	61·0	43·4	19·4	20·7
1828	36·8	61·9	43·5	20·0	19·9
1829	35·8	66·0	42·3	19·2	22·2
1830	38·3	69·0	44·8	19·1	20·9

[1] Including certain land revenue in Ireland.

Note.—The official values of Imports and Exports were based upon the old rates or values of goods as laid down in the book of rates of Charles II and George I, and though affording a basis for estimating the comparative volume of trade from year to year, give no correct idea of the value of the trade of each year at the current prices of the year.

TABLE III.—H. of C., 1844, VIII.—U.K. Clearances, British and Foreign Vessels.

Year.	1814	1815	1816	1817	1818	1819	1820	1821	1822	1823	1824	1825	1826	1827	1828	1829	1830
	oo	oo	oo	oo	oo	oo	oo	oo	oo	oo	oo	oo	oo	oo	oo	oo	oo
Inwards—																	
British	8·9	8·8	9·7	11·2	13·0[1]	11·9	11·2	10·8	11·1	11·2	11·7	13·4	12·3	13·1	13·4	13·5	13·5
Foreign	5·2	5·3	3·1	3·3	6·2[2]	4·2	3·4	3·2	3·3	4·0	5·6	6·9	5·7	6·0	4·9	5·2	5·3
Outwards—																	
British	8·6	8·8	9·0	10·7	11·4	10·2	10·1	9·7	10·1	9·6	10·0	10·8	10·8	11·4	12·2	12·6	12·7
Foreign	4·6	4·7	2·5	2·9	5·3	3·7	2·9	2·6	2·8	3·4	5·0	6·0	5·4	5·7	4·4	5·0	5·1
[3]Ships owned by Gt. Britain																	
Number	19·9	20·2	20·4	20·0	20·2	20·2	20·1	U.K.									
	mil.	mil.	mil.	mil.	mil.	mil.	mil.	mil.	mil.	mil.	mil.	mil.	mil.	mil.	mil.	mil.	mil.
Tonnage	2·3	2·4	2·4	2·3	2·3	2·3	2·3	2·3	2·3	2·3	2·3	2·3	2·4	2·2	2·2	2·2	2·2
[3]Ships built :																	
Number...	660	877	810	656	704	740	582										
	oo	oo	oo	oo	oo	oo	oo	oo	oo	oo	oo	oo	oo	oo	oo	oo	oo
Tonnage	84·1	101·0	82·7	78·0	84·7	87·5	65·0	59·5	51·5	63·8	93·2	124·0	119·0	95·0	90·0	77·6	77·4

[1] Increase mainly North American Colonies. [2] Increase mainly Holland and Belgium. [3] H. of C., 1821, XVII.

Note.—"Tonnage returns only reliable after 1827, as before that date registry contained numerous ships which should have been struck off registry."—*Transactions*, Statistical Society of London "Increase of Wealth and Expenditure," Colonel Sykes.

UNITED KINGDOM EXPORTS.

TABLE IV.—*Accounts and Papers*, 1829, XVII.

For Year 1827.	Declared Value. £ mil.	Total. £ mil.
Wearing Apparel	·4	·4
Brass and Copper	·78	·78
Cotton Goods	12·9	
Hosiery	1·1	17·5
Yarn and Twist	3·5	
Earthenware	·4	·4
Hardware and Cutlery	1·3	2·5
Iron and Steel	1·2	
Linen	2·0	2·0
Wool	4·6 ·5 ·2	5·3

EXPORTED COTTON MANUFACTURES.

TABLE V.—*Accounts and Papers*, 1846, XLIV.

Year.	Yards.	Declared Value.	Hosiery and Small Ware Value.	Cotton, Yarn and Twist.	
	Mil.	£ mil.		Lbs. mil.	Value.
1814	192·3	16·4	·8	12·7	2·7
1815	252·8	18·1	·9	9·2	1·6
1816	189·2	12·3	·7	15·7	2·6
1817	236·9	13·4	·5	12·7	2·0
1818	255·3	15·7	·7	14·7	2·3
1819	202·5	11·7	·5	18·0	2·5
1820	250·9	13·2	·5	23·0	2·8
1821	266·4	13·1	·6	21·5	2·3
1822	304·4	13·8	·7	26·5	2·6
1823	301·8	12·9	·7	27·3	2·6
1824	344·6	14·4	·8	33·6	3·1
1825	336·4	14·2	·9	32·6	3·2
1826	267·0	9·8	·7	42·1	3·4
1827	365·4	12·9	1·1	44·8	3·5
1828	363·3	12·4	1·1	50·5	3·5
1829	402·5	12·5	1·0	61·4	3·9
1830	444·5	14·1	1·1	64·6	4·1

TABLE VI.—HOUSE OF COMMONS, 1829, XVII (261).
Cotton.—White, Plain, Printed, Checked or Dyed.

Country.	1823.		1824.		1825.		1826		1827		1828.	
	Yards.	Value.	Yards.	Value.	Yards.	Value.	Yards.	Value.	Yards.	Value.	Yards.	Value.
	mil.	£ mil.	mil.	£ mil.	mil.	£ mil.	mil.	£ mil.	mil.	£ mil.	mil.	£ mil.
Germany	35·8	1·73	34·6	1·57	37·0	1·64	38·4	1·36	43·6	1·53	39·4	1·31
Portugal	19·4	·66	24·4	·80	20·1	·63	18·4	·53	25·3	·72	18·2	·48
Italy and Islands	28·2	1·17	33·3	1·28	27·3	·99	28·1	·92	28·0	·89	32·7	·99
East India	15·8	·78	19·6	·85	18·5	·80	22·8	·89	36·0	1·34	35·5	1·32
U.S.A.	36·2	1·54	41·8	1·82	46·7	2·11	31·2	1·33	52·8	2·25	36·1	1·60
Brazil	32·6	1·27	34·2	1·34	40·6	1·55	24·8	·80	37·1	1·11	63·0	1·95
United Netherlands	18·0	·89	13·8	·70	14·4	·75	12·8	·55	13·6	·54	13·2	·49
British West Indies	24·6	·97	27·5	1·04	27·1	1·15	19·2	·72	26·6	·87	21·0	·68

Cotton.—Twist and Yarn.

Country.	1823.		1824.		1825.		1826.		1827.		1828.	
	Lbs.	Value.	Lbs.	Value.	Lbs.	Value.	Lbs.	Value.	Lbs.	Value.	Lbs.	Value.
	mil.	£ mil.	mil.	£ mil.	mil.	£ mil.	mil.	£ mil.	mil.	£ mil.	mil.	£ mil.
Russia	6·8	·66	11·9	1·13	8·9	·89	12·0	1·0	12·0	·93	14·8	·95
Germany	12·9	1·24	12·2	1·15	14·9	1·48	16·9	1·41	17·0	1·35	17·2	1·25

TABLE VII.

Sugar, Imported.—In column of re-exported, refined is converted into raw at the rate of 34 cwt. raw for 20 cwt. refined.

Year.	Imports from all parts.	Re-export raw.	Refined Sugar.	Home Consumption.	Coffee.	
					Imported.	Re-exp'rt'd
	Mil. cwt.	Mil. cwt.	Mil. cwt.	Mil. cwt.	Mil. cwt.	Mil. cwt.
1812	3·8	·67	·28	2·6	·4	·64
1813		no records				
1814	4·0	1·05	·55	2·0	1·0	1·2
1815	4·0	·87	·60	2·0	·8	·9
1816	3·8	·67	·58	2·0	·5	·7
1817	3·8	·49	·70	2·1	·5	·5
1818	3·8	·49	·71	2·2	·4	·4
1819	4·0	·40	·52	2·7	·4	·4
1820	4·0	·50	·67	2·4	·4	·4
1821	4·0	·48	·64	2·6	·4	·4
1822	3·6	·41	·37	2·6	·4	·3
1823	4·0	·40	·45	2·8	·4	·3

Year.	Bricks.	Candles.	Soap.	
			Hard.	Soft.
	Hund. Thous.	Millions.	Millions.	Millions.
1812	9	75	62	4
1813	9	69	60	4
1814	7	73	61	4
1815	8	78	69	4
1816	7	81	70	4
1817	7	78	65	4
1818	8	77	68	4
1819	10	81	69	5
1820	10	82	74	5
1821	10	87	79	6
1822	10	89	81	6
1823	11	97	88	6

Year.	Lbs. of Tea sold at quarterly sales of East India Co.	Numbers at Smithfield Market.	
		Cattle.	Sheep.
	Millions.	Thousands.	Thousands.
1812	24·8	134	954
1813	25·9	138	891
1814	29·6	135	871
1815	27·8	124	963
1816	23·4	120	968
1817	25·4	129	1,045
1818	27·3	138	963
1819	26·2	135	950
1820	26·1	132	948
1821	27·6	142	1,107
1822	27·8	142	1,340
1823	27·7	149	1,264

Note.—The compilers of these tables would not even allow that such increase as is shown pointed to any increase of wellbeing, but commented as follows: "Increase of candles shows a vast increase of night labour, vast increase of barracks, gaols, workhouses and other public works and factories of commodities for export will suffice to account for a great portion of the vast

TABLE VIII.—EXPENDITURE (*exclusive of Debt Reductions*).

Year.	Debt Charges.	Military and Naval.	Civil.	Total.
1812	24·5	53·5	9·1	87·2
1813	26·4	58·8	9·5	94·8
1814	27·2	74·1	9·6	111·1
1815	30·0	72·4	10·4	112·9
1816	32·2	56·4	10·7	99·4
1817	32·8	28·1	10·2	71·3
1818	31·4	17·7	9·5	58·7
1819	31·2	15·7	10·5	57·7
1820	31·0	16·6	9·7	57·5
1821	32·0	16·7	9·6	58·4
1822	31·9	16·6	9·8	58·4
1823	31·3	15·2	9·9	56·4
1824	30·0	14·3	9·9	54·3
1825	30·0	15·1	10·0	55·4
1826	29·2	15·0	9·8	54·0
1827	29·2	16·7	10·0	56·0
1828	29·4	16·2	10·2	55·9
1829	29·3	15·1	8·9	53·4
1830	29·1	15·1	9·3	53·7

Accounts and Papers, 1868-9, XXXV.

TABLE IX.

Year.	*Accounts and Papers*, 1846. XLIV.		U.K. Accounts, etc., 1869, XXXV.
	County Rates.	Poor Rates.	Year ending Jan. 5. Total Gross Income.
1812	·50	—	71·0
1813	·54	8·6	70·3
1814	·57	8·3	74·6
1815	·54	7·4	77·8
1816	·55	6·9	79·1
1817	·56	8·1	69·2
1818	·64	9·3	57·6
1819	·65	8·9	59·5
1820	·69	8·7	58·0
1821	·67	8·4	59·8
1822	·61	7·7	61·6
1823	·57	6·8	59·8
1824	·56	6·8	58·6
1825	·67	6·9	59·7
1826	·73	6·9	57·8
1827	·73	7·7	54·7
1828	·72	7·7	54·7
1829	·69	7·6	56·6
1830	·70	8·1	55·3

increase of bricks. The excess of soap, used in the manufacture of commodities for export, for which no corresponding equivalent has been obtained, will suffice to account for above increase."—From *Statistical Illustrations of the British Empire.*

INCREASE OF WEALTH AND EXPENDITURE.

TABLE X.

1822. Number of inhabited houses in Great Britain assessed at rental above £10 349,945
Rental of whole, £10 mil.
Number of houses assessed at less than £10 162,007
Rental of whole, £1 mil.
1832. Number of houses over £10 443,090
Rental of whole, £12 mil.
Tax on houses under £10 repealed in 1825.

Legacy Duty.

1820-26. Average annual duty £997,180
1827-33. ,, ,, ,, ... £1,176,209
Average annual increase, 17·9 per cent.

Year.	Shopmen, Warehousemen and Porters.	Clerks, Bookkeepers and Office Keepers.	Travellers or Riders.
1820	34,081	31,211	1,664
1826	36,556	—	—
1832	50,191	44,059	2,618

Estimated increase of expense on luxury between 1820-1832-3 (saddle horses, private carriages, male servants, armorial bearings, dogs, racehorses): £2,977,997.

Excise (average annual increase).

Millions.

- 5·8 lb. tea at 4s.
- 11·4 lb. coffee at 11os. per cwt.
- ·4 cwt. sugar at 64s. 6d. per cwt.
- 2·4 lb. snuff and tobacco at 3s. 6d. per lb.
- 8·8 gallons of British spirit at 8s. 6d. per gallon.
- ·09 barrels of ale and beer at 13s. 6d. per barrel.
- ·9 gallons of wine at 11s.
- 22·5 lb. of soap at 45s.

Total annual average increase ... £8·4 mil.

Transactions, Statistical Society of London.

TABLE XI.

Year.	Price of stock. Highest 3 per cent. Consols.	Bankruptcies	Average price of Wheat.	Highest price. Monthly average.	Lowest price. Monthly average.
1812	58¾	1,616	124/–	155/– Aug.	105/1 Jan.
1813	61⅝	1,599	107/10½	122/8 Mar.	73/– Dec.
1814	66¼	1,066	74/7½	78/6 Jan.	67/8 July
1815	61	1,285	64/4½	71/9 April	55/9 Dec.
1816	63	2,029	75/1½	103/– Dec.	52/6 Jan.
1817	83⅝	1,575	94/4½	111/6 June	76/2 Sept.
1818	79	1,056	84/2	90/8 April	80/5 Dec.
1819	68	1,499	73/2	80/5 Feb.	65/10 Dec.
1820	69¾	1,381	65/10	73/9[1]	54/–[1]
1821	77¾	1,238	54/5	70/7 Sept.	46/2 Dec.
1822	80½	1,113	43/3	50/7 Jan.	34/– Nov.
1823	84⅛	963	51/9	62/7 June	39/11 Jan.
1824	95⅛	923	62/–	67/7 Feb.	54/6 Sept.
1825	83⅜	1,107	66/6	69/2 May	63/4 Dec.
1826	83⅞	2,583	—	60/8 Feb.	54/– Nov.
1827	82¼	1,040	—	61/9 July	52/– Dec.
1828	87⅛	1,223	—	94/– Oct.	52/– Mar.
1829	94⅛	1,590	—	82/– Aug.	70/– Oct.
1830	81⅞	1,308	—	78/– April	73/– Jan.

(From *Annual Register*).

[1] Weekly average.

The Limitation of the Liability of Shipowners

By H. C. Gutteridge,
Cassel Professor of Commercial Law, London School of Economics.

The Report of the Imperial Shipping Committee,[1] which has just been published, contains certain recommendations which, if carried out, would effect such fundamental changes in the English law, that the findings of the committee call for very careful consideration on the part of all the interests concerned. A stage has now been reached in the contest between cargo owners and shipowners at which this issue will have to be fairly and squarely faced, namely, whether shipowners are to be allowed to continue to contract themselves out of liability for loss or damage to cargo entrusted to their care, as is the case at present; or whether this country is to follow the lead given by the United States and the British Dominions Overseas, and restrict the freedom of contract of the parties by controlling the right of the shipowner to except his liability for loss or damage to goods caused by the negligence either of himself or his servants.

The position at the present time may be summarized in this way. So far as the carriage of goods by rail is concerned the policy of the English law is to check and control the power of a railway company to contract out of liability for negligence in the carriage of goods. No condition limiting the responsibility of the company for loss or damage to goods resulting from negligence on the part of the company or its servants is valid in law unless the contract is in writing, signed by the consignor or his agents, and unless the condition is one which, in the opinion of the tribunal which is to decide the dispute, is both just and reasonable.[2] As regards contracts for the carriage of goods by sea there is, on the other hand, no obstacle placed by the law in the way of absolute freedom of contract. There is nothing to prevent a shipowner, as he often does, from contracting himself out of liability to such an extent that the cargo owner is in some cases practically debarred from obtaining any relief, unless the shipowner is willing to compensate him as an act of grace.

This practice seems to be of comparatively recent origin. Lord Justice Scrutton, in the first edition of his work on *Charter Parties and Bills of Lading*, published in 1886, called attention to the change which had already taken place then, and said: "Shipowners have gradually protected themselves by exceptions in their bill of lading

[1] *Report of the Imperial Shipping Committee*, 1921, Cd. 1205.
[2] Railway and Canal Traffic Act, 1854, section 7.

against every risk of liability for damage to the goods they carry, until the bill of lading contains fifty or sixty lines of closely printed conditions and exceptions, and there appears to be no duty imposed on the fortunate shipowner but that of receiving the freight."[1] The precise date at which the practice came into being is uncertain. The evidence before the Imperial Shipping Committee was to the effect that it arose about the year 1885, but this would seem to be incorrect in view of the passage from Lord Justice Scrutton's work which has just been quoted. In any case, as early as 1872 we find a bill of lading containing an exception by which the shipowner was not to be liable for loss of goods under any circumstances whatsoever.[2]

The policy of the law in relation to contracts for the carriage of goods by rail is based upon the theory that a railway company is in the enjoyment of a monopoly, and that it is imperative that the public should be protected against any abuse of so privileged a position. As regards the carriage of goods by sea it is assumed, on the other hand, that there is free competition, with the result that the state is not called upon to interfere. In theory this is no doubt the case, but in practice we find the cargo owners contending that the great steamship lines possess something very much like a monopoly, and that small traders, at all events, are completely at their mercy. Shipowners do not as a rule exact their full pound of flesh, and they pay many claims which, as a strict matter of law, they could dispute ; but the cargo owners take up the attitude that they should not be compelled to be suppliants for lenient treatment, but should be definitely protected against the power of the shipowner to make his own terms.

There is, on the other hand, a great deal of force in the contention of the shipowners that the modern practice is justifiable on the ground that it leads to simplicity, and that the cargo owner is not prejudiced because he is able to fall back on the underwriters to cover him against risks which the shipowner will not undertake, and that the only result of putting the burden back on to the latter will be to increase freights, so that nothing will be gained by altering the practice as it now exists.

These are questions which it hardly comes within the province of a lawyer to discuss; but this much is clear, that merchants as a class are very strongly opposed to the present day system, as is shown by the following resolution of the Association of British Chambers of Commerce passed at Glasgow on July 7th, 1920 :

" That the Government be urged to introduce legislation whereby it shall be enacted that any stipulation inserted in a contract of carriage by sea, by which the liability of the carrier to accept a proper measure of responsibility for the safe custody and delivery of goods entrusted to his charge for carriage is restricted or eliminated shall be null and void."

[1] Scrutton on *Charter Parties and Bills of Lading*, 1st edition.
[2] Taubman *v.* Pacific S.S. Co., 26 L.T. 704.

It would seem that cargo owners have been led to demand this change in the law on account of the remarkable increase in the pilferage of cargo which has taken place of late. The evidence given before the Imperial Shipping Committee was to the effect that pilferage has increased by 75 per cent. since 1914 and that it may now be regarded as an organized and wholesale practice. The monetary value of claims for pilferage rose from 1·44d. per ton in 1913 to 26·91d. per ton in 1920.[1]

Pilferage does not seem to have been a problem which agitated the commercial community of old. Even such comparatively modern works as Lowndes's well-known treatise on Marine Insurance, published in 1881, are silent on the topic. It was regarded as being the result of negligence or carelessness on the part of the ship's officers, and consequently a loss to be borne by them, or in default by the shipowner.[2] But with the increase in the size of ships, and the speeding up under modern conditions of the rate at which they have to be loaded and discharged, a different point of view began to prevail.[3] The matter came to a head during the war. It seems to be indisputable that war conditions tend to produce a relaxation of the moral standard of the average individual, and this certainly appears to have been the case as regards respect for the property of other persons when on board a ship. The result has been that the present-day bill of lading almost invariably excepts pilferage as one of the perils for which the shipowner is not to be responsible. Unfortunately for the cargo owner, the marine underwriters have not shown any readiness to undertake the risk. They have declined to cover it in its entirety, and the pilferage clause in a policy at the present time usually runs as follows:

"In consideration of an additional premium of — per cent. it is hereby agreed that this policy covers the risk of theft and/or pilferage irrespective of percentage, but only to pay 75 per cent. of the insured value of any goods so lost."[4]

In other words the cargo owner can only obtain partial protection at a stiff premium whilst the shipowner escapes liability altogether. How far the prevalence of pilferage has been due to a relaxation of the control formerly exercised by ship's officers over the process of loading and discharge is a very controversial question, but there can be no doubt that there is a disposition on the part of shippers of goods to take the view that shipowners have succeeded in exempting themselves from liability for losses due to this cause, and are consequently indifferent to the adoption of adequate measures to counteract this evil. On the other hand, it must be remembered that

[1] Trade Supplement to the *Times* of November 20th, 1920. [2] 1 Molloy, p. 329.

[3] See Steinman *v.* Angier Line (1891), 1 Q.B. 619, and cf. De Rothschild *v.* Royal Mail Steam Packet Co., 7 Ex. 34. It should be noted that "theft" in this connection does not include pilferage. It only includes abstraction by violent means by persons external to the ship. Taylor *v.* Liverpool S.S. Co., 1874, L.R. 9 Q.B. 546.

[4] Institute Cargo Clauses, 1921. The premium is believed to be (in the case of certain goods) as high as 10 per cent.

under present-day conditions the master of a vessel is not able to exercise the same supervision over the safety of the cargo as formerly owing to the increased difficulty of his task, and also because of the interference of other authorities with the custody of the cargo at crucial moments, and that the underwriter under a "warehouse to warehouse" policy, such as is usual at the present time, undertakes a very serious and somewhat undefined risk.

In order to understand the controversy which has arisen between shippers and shipowners as regards conditions contained in contracts of affreightment, it is necessary to examine briefly the liability under English law of the shipowner for the cargo entrusted to his charge. This liability is twofold. He is in the first place liable if he does not provide a seaworthy ship, that is to say, a ship which is fit for the purpose of carrying the particular cargo in question on the particular voyage which is contemplated. This is a term which is implied in every contract of affreightment, and it is important to note that this obligation is absolute, i.e., it is not a question whether the shipowner has exercised due care and diligence in seeing that the ship is fit, but whether the ship is in fact fit, even though the unfitness may be due to some hidden defect, which no amount of care or diligence on the part of the owner would have revealed. The stringency of this rule has led in practice to the introduction of exceptions by the owner intended to exclude its operation, though the Courts regard such clauses with a very jealous eye and refuse to give effect to them unless the intention to exclude the implication is clear beyond doubt.

In the second place the shipowner is by the Common Law absolutely responsible, unless otherwise agreed, for the safe delivery of the goods entrusted to him for carriage. He is in effect an insurer of the goods; and is liable for any loss or damage suffered during transit, subject to this, that he is excused in the following circumstances, viz., loss or damage due to the act of God, the King's enemies, defects inherent in the goods, default on the part of the goods' owner (such as insufficiency of packing), and a justifiable sacrifice in an emergency, as, for instance, the case of jettison. These Common Law defences are, however, an inadequate protection to the shipowner against the very serious risks which he has to encounter and, if the matter rested there, it would be practically impossible for him to carry on business. It is, therefore, invariably the case that the bill of lading contains a comprehensive list of matters in respect of which he is to be relieved from responsibility, and these have come to be known as the "exceptions."[1] By English law these exceptions furnish a complete defence to a claim for loss, provided that two conditions are satisfied: (1) the excepted peril must be the direct or dominant cause of the loss; (2) the peril causing the loss must not be one which could have been avoided by

[1] For a list of exceptions which have been judicially construed, see Scrutton, *Charter Parties and Bills of Lading*, 10th edition, p. 231.

reasonable care on the part of the shipowner.[1] But the degree of protection given by the exceptions is considerably curtailed by the operation of certain other rules of the law. A breach by the shipowner of the implied warranty of seaworthiness of the ship in which the goods are carried will prevent an exception from being relied on if the loss was in fact due to the unseaworthiness, e.g., where perils of the sea are excepted, but the goods are lost because an unseaworthy ship had to encounter those perils. A further and more drastic limitation of the protection given by the exceptions is contained in the rule by which an unjustifiable deviation from the ordinary course of the voyage has the effect of displacing the contract contained in the bill of lading altogether, and of depriving the shipowner of the benefit of any defences other than those which are allowed him, as already mentioned, by the Common Law. Even those defences cannot be relied on by him unless he can show that the loss would have taken place in any event quite apart from the deviation.[2]

A shipowner has, however, certain statutory exemptions, which are conferred on him by the Merchant Shipping Acts. The Act of 1894 relieves him from liability for loss due to fire resulting without his actual fault or privity, or for loss caused by robbery, embezzlement or theft of certain valuable articles, the nature and value of which has not been declared in writing to the shipowner or master at the time of shipment. His liability is also limited by the Act to a fixed amount per ton of the ship's tonnage in certain other cases including loss or damage to goods on board the ship occurring without his actual fault or privity. This limitation of liability has been extended by the Act of 1900 to any loss or damage to property or rights of any kind, whether on land or water, caused by improper navigation or management of the ship, but without the actual fault or privity of the shipowner. It should be noted that the statutory exception of loss due to fire will apply even though the fire was due to the unseaworthiness of the ship.[3]

The exceptions in a bill of lading may for present purposes be divided into two categories. The first of these includes those perils which come into being because the carriage of the goods is taking place by sea, as, for instance, damage to the goods by rough weather during the voyage. The second category embraces those casualties which arise in connection with the loading, the safe custody of the goods during transit, and their discharge. The feature which distinguishes the latter casualties from the former is that, theoretically at all events, they cannot arise without some want of skill or care on the part of the shipowner or his servants. It is not disputed that perils included under the first heading are such as the shipowner may fairly claim exemption from, and that it is only reasonable that he should be allowed to stipulate that they shall not fall upon him but

[1] Or his servants. [2] Morrison *v.* Shaw Savill (1916) 2 K.B. 783.
[3] Virginia Chemical Co. *v.* Norfolk Co. (1912), 1 K.B. 229.

rather on the shipper or his underwriters. The controversy is as to the exceptions in the second category, and the point which is made by the cargo owners is that they are in effect against public policy as they weaken the shipowner's interest in the protection of the cargo against loss or damage.

In other words the issue is whether it is desirable on economic grounds that the present system of absolute freedom of contract should prevail, or that the shipowner should be compelled to undertake liability for any negligence, either on his own part or that of his employees. This is the issue which was before the Imperial Shipping Committee and which has been dealt with by them in their report. They recommend, in the first place, that legislation should be introduced restricting the power of the shipowner to contract himself out of liability for what they term "carrier's risks," i.e., loss or damage due, not to the perils of navigation, but to carelessness in the handling, stowage, custody or delivery of the cargo. Secondly, they recommend that such legislation should be made uniform throughout the British Empire. The report also contains a further recommendation that such legislation should be modelled on the provisions of the Canadian Water Carriage of Goods Act, 1910.

The changes in English law which are adumbrated by these recommendations are so fundamental and so far-reaching that it is difficult to appreciate their operation without examining in some detail the main provisions of the American and Colonial Statutes upon which these recommendations are largely based. It must be borne in mind that the rules of English law apply in Canada, Australia and New Zealand, and, in the main, also in the United States.

The first attempt to solve the problem was made in the United States. The American law had always adopted a different attitude to that of the English law towards the attempts of shipowners to contract themselves out of liability. Exceptions in contracts of affreightment relieving the shipowner from responsibility for negligence were held to be void as being against public policy.[1] In 1893 Congress passed the celebrated Harter Act which gave statutory effect to the ruling of the American Courts. This Act does two things. It prohibits conditions in shipping contracts which relieve shipowners from the consequences of negligence in the proper loading, stowage, custody, care, or proper delivery of cargo, and declares such conditions to be void.[2] It also prohibits and renders unlawful all conditions in such contracts which in any way lessen the shipowner's obligation to exercise due diligence in making the ship fit for the intended voyage.[3] It does not, as is often believed, do away with the implied warranty of seaworthiness or reduce it to an undertaking merely to use due diligence,[4] but it restricts the power of the ship-

[1] The *Montana*, 129 U.S. Reports 397. [2] Harter Act, section 1. [3] *Ibid.*, section 2. [4] The *Carib Prince*, 170 U.S. Reports 665; followed by the English Courts in McFadden *v.* Blue Star Line (1905), 1 K.B. 697.

owner to contract himself out of the implied warranty. Thus a shipowner is not prevented by the Act from excepting his liability for latent defects in the hull or machinery of the ship.[1] Having thus restricted the shipowner's power to contract, the Act goes on to give him a statutory protection. It exempts him from liability for loss or damage to cargo in certain events provided that due diligence has been used to make the ship seaworthy. The events specified are the following:

(*a*) Faults or errors in navigation or in the management of the vessel.
(*b*) Dangers of the sea, or other navigable waters, acts of God, or public enemies, or the inherent defect, quality, or vice of the things carried, or the insufficiency of package, or seizure under legal process.
(*c*) Acts or omissions of the shipper or owner of the goods, his agent or representative.
(*d*) Any deviation due to saving or attempting to save life or property at sea.[2]

The Act applies to all vessels transporting goods between United States ports and foreign countries, whatever their nationality may be, and for this reason it is not unusual to find its terms incorporated in contracts of affreightment made by English shipowners, as the American Courts will enforce the Act where performance of the contract is to be either wholly or partly within the territory of the United States, irrespective of the place in which the contract is entered into or the law of the ship's flag and even of the declared intention of the parties as to the law by which they elect to be governed.[3] A somewhat curious situation has therefore arisen in several cases in which the English Courts have been called upon to construe the terms of the American statute.[4]

How far the Act has achieved its object is a matter of controversy. The witnesses before the Committee were divided as to their opinions on this question, but it seems to be obvious that legislation of this kind should tend to simplify the form of a bill of lading, by eradicating a goodly proportion of the multitudinous clauses such as are contained in the modern English bill of lading; and should also lead to a certain degree of standardization of the clauses contained in bills of lading. It has been found possible to evade the terms of the Act by agreeing to a fictitious value for the cargo, a practice which the Courts have found to be legal.[5]

The Harter Act has been reproduced in different forms in the Commonwealth of Australia (Sea Carriage of Goods Act, 1904), in the Dominion of New Zealand (Shipping and Seamen Acts of 1908

[1] The *Prussia*, 93 Fed. Rep. 837.
[2] Harter Act, section 3. [3] Worsted Mills *v.* Knott, 179 U.S. Reports 69.
[4] See Anthony Hordern *v.* Commonwealth Line (1917), 2 K.B. 420.
[5] See Tuck *v.* America Levant Line (judgment of Bailhache J., unreported, but referred to in the case last cited).

and 1911), and in the Dominion of Canada (Water Carriage of Goods Act, 1910). In all these cases the provisions of the Harter Act form the basis of the legislation, but the different statutes vary considerably.

The Australian Act differs from its prototype in one very important particular. It provides that the warranty of seaworthiness is to be implied in every bill of lading, unless otherwise agreed ; and it then goes on to enact that subject to this condition being complied with the shipowner is to be relieved from liability in certain specified events, which are identical with those excepted by the Harter Act. The result of this would seem to be that under the Australian statute the shipowner becomes (in default of any agreement to the contrary) absolutely responsible if there should be a latent defect in the hull or machinery which could not be discovered by reasonable care or diligence, whereas in a similar case under the Harter Act he would escape liability. It may be observed here parenthetically that the precise effect of the Australian Act is by no means clear ; it is obscurely worded and has not been interpreted by the Courts. Section 5 (*b*) of the Act, which prohibits clauses excluding the obligation of the shipowner to use due diligence in making his ship seaworthy, is difficult to reconcile with section 8 of the Act, which annexes an implied and absolute warranty of seaworthiness to every contract contained in a bill of lading. The Act only applies to ships carrying goods from Australia.

The New Zealand Act approximates more closely to the Harter Act, in relieving the shipowners from liability for loss or damage in the specified events if he has used due diligence in making the ship seaworthy ; but it differs from the American Act on one essential point, namely, that it renders exceptions of negligence and of the duty to use due diligence in making the ship seaworthy void, unless the Court before which any question relating thereto is tried, considers the exception to be just and reasonable. In other words it applies the principle of the English Railway and Canal Traffic Act of 1854 to the carriage of goods by sea. Unlike the Harter Act and the Australian Act it contains no penalty for an infraction of its provisions. The joint effect of the Act and the amending Act of 1911 seems to be that the former is only applicable to contracts for the carriage of goods from New Zealand to other countries.

The Canadian Act goes further than any of the statutes which have been mentioned, and as it has been selected by the Committee as the proposed model for future legislation it is the most important for our present purposes. It resembles the Harter Act, in so far as it forbids the exception of the shipowner's liability for negligence, and for failure to use due diligence in making the ship seaworthy, but it extends the latter obligation so as to include a duty to make and keep the ship's hold, refrigerating and cool chambers and all other parts of the ship in which goods are carried fit and safe for

their reception. This is a provision borrowed from the Australian Act.

Apart from this the Canadian Act possesses certain special features which are not to be found in the other statutes. The exemption from liability given to the shipowner in certain events differs widely from that conferred on him by the American, Australian and New Zealand Acts. It falls under two headings; the first exemption, which is contained in section 6 of the Act, is conditional on the exercise of due diligence to make the ship seaworthy. Subject to this the shipowner is relieved from liability for faults or errors in navigation or management of the ship, and for latent defects. The second class of exemptions, which are to be found in section 7 of the Act, are unconditional, and do not appear to be dependent on seaworthiness; the shipowners being relieved under all circumstances for any liability for losses due to fire, perils of the sea or other navigable waters, acts of God, public enemies, inherent defects in the goods, insufficiency of packing, seizure under legal process, acts or omissions of the shipper or owner of the goods, reasonable deviation, strikes and loss arising without the actual privity or fault of the shipowner, his agents or servants.

It is desirable to pause here and to consider the purport of section 7 of the Act, which seems to introduce a very far reaching and important change in the existing state of the law. The effect of it appears to be to protect the shipowner against liability for any loss due to one of the enumerated causes, whether it arises from unseaworthiness or not,[1] with the result that he obtains a very much wider degree of protection than would be given to him if the exceptions were contractual and embodied in the bill of lading.[2] This fundamental change may be justifiable, either on the ground that some concession is due to the shipowner in return for the restriction placed on his right to contract himself out of liability, or on the ground that the rules of law relating to the consequences of unseaworthiness are artificial and possibly unduly severe, but, however this may be, the change is a somewhat revolutionary one.

It is difficult to refrain from commenting on the obscurity of the Colonial Statutes and the Harter Act, all of which leave a very great deal to be desired as regards precision and lucidity of expression. Section 7 of the Canadian Act provides a very good instance of legislative ambiguity. It appears at first sight to give the shipowner unconditional exemption in the named events, i.e., irrespective either of the implied warranty of seaworthiness or of his common law duty to use due care in carrying and handling the cargo. As regards his duty to supply a seaworthy ship, a comparison between the wording of section 6 and that of section 7 seems to make it impossible to come to any other conclusion save that the omission of any reference in section 7 to this duty was

[1] See Virginia Chemical Co. *v.* Norfolk Co. (1912), 1 K.B. 229.
[2] The *Glenfruin*, 1885, 10 P.D. 103.

intentional. But seeing that the whole scheme of the Act, and more particularly of section 4, is to preserve unimpaired the common law duty of the shipowner not to be negligent, it is difficult to see how section 7 can be construed except as subject to and controlled by the obligation "to carefully handle and stow goods and to care for, preserve and properly deliver them."

The possible evasion of the provisions of the Canadian Act by the agreement of a fictitious value for the goods is countered by a clause which provides in terms that no valuation in the bill of lading is to be binding on any party. This cures a defect which is to be found in the Harter Act.

But one of the most salient distinctions between the Canadian Act and the other Acts which have been mentioned, is that it fixes a statutory limit of a hundred dollars as marking the maximum liability of the shipowner in respect of any one package unless a higher value is stated in the bill of lading. This is a very important concession to the shipowners, as it goes a long way towards meeting the difficulty created by the prevalence of pilferage. If the cargo owner is compelled to declare the nature of valuable goods, the task of the shipowner in making arrangements for the safe custody of such goods is immensely facilitated, and this provision also enables the shipowner to make a charge for the additional trouble he incurs in this respect.[1]

Finally, it should be noted that the Canadian Act applies to all shipments from Canada, but that the Canadian Courts do not, like the United States Courts, apply the Act to contracts governed by the law of other countries.[2]

It is not possible in this brief survey to do more than touch on the law as it exists in countries other than those which have been mentioned. The French law[3] is substantially the same as the English law on this point, and the same is true of the law of the other maritime nations of Europe. It is understood that important commercial interests in all these countries are pressing for some restriction of the shipowner's right to contract himself out of liability, and that steps had been taken, prior to the war, in Germany with this end in view. The Japanese Commercial Code[4] provides that no shipowner may contract himself out of liability for damage due to his own default, or to the bad faith or gross negligence of any of his servants or agents or for damage due to unseaworthiness of his ship.

Legislation of this character is open to two main objections. In the first place, there is a good deal of force in the argument that it substitutes for the unimpeachable security of a policy of insurance, the somewhat less satisfactory security of the shipowner's liability. It is probably for this reason that, in spite of the Harter Act, it is

[1] It is, of course, open to the contracting parties under English law to insert a term to this effect in the bill of lading, and this is sometimes done.
[2] Vipond *v.* Furness Withy (1916), 54 Canadian Supreme Court Reports 523.
[3] Fuzier-Herman (*Code Civile annoté*), "Armateur," No. 178.
[4] Japanese Commercial Code, section 592.

usual for owners of cargo in America to insure as though the Act did not exist. Cargoes at the present day have increased enormously in value, and one can well understand that their owners are anxious to avoid any risk.

Secondly, exceptional circumstances are likely to occur from time to time in which the enterprise of shipowners will be checked and trade will be throttled, unless shipowners are left free to make such terms as they may desire. Such a case would, for instance, arise where the contemplated voyage is one involving exceptional risks, or where the adventure is in the nature of an entirely new enterprise of which the risks cannot be foreseen with any degree of certainty. An instance of the latter kind is the case of the carriage of frozen meat, which, as one of the witnesses pointed out to the Imperial Shipping Committee, would have been very seriously hampered in its earlier stages if the shipowner had been debarred from putting the risk on to the cargo owner. This difficulty might be surmounted by giving power to some specially constituted authority to grant dispensation from the statutory restrictions in certain approved cases, but the difficulty will be to agree upon the authority to which this power should be confided.

Both these difficulties have been considered by the Imperial Shipping Committee, and they recommend that legislation should be introduced which should be uniform throughout the British Empire, on the lines laid down in the Canadian Act, and further that a Joint Imperial Board should be constituted which should have power to deal with any exceptional cases which might arise and to grant total or partial exemption from the provisions of the Act if considered desirable in any such case.

Whether such legislation should be world-wide or not, is a question which is not dealt with in the report. Theoretically this should be feasible, and it certainly possesses a manifest advantage in that it would eliminate any possibility of competition between countries which make the shipowner liable and those which leave him to make his own terms. There is, however, a serious practical difficulty in discovering a method by which it would be possible to grant a special dispensation under special circumstances such as those alluded to above.

The real strength of the case for an amendment of the law would seem to lie in the probability that a perennial source of friction and litigation between shipowners and merchants would be removed to a large extent, and that a clearer definition of the shipowners' liability would no doubt tend to diminish the complexity of the modern bill of lading.

There is a further question which has not been dealt with specifically by the Committee in the report, but which seems to require careful consideration. This is whether the suggested legislation should follow the scheme laid down in section 7 of the Canadian Act, and relieve the shipowner from liability for losses due to perils inci-

dental to the voyage, irrespective of the seaworthiness of his ship. No doubt in practice this could be met by the inclusion in the bill of lading, either of an express warranty of seaworthiness or an undertaking by the shipowner to use due diligence in making his ship fit for the voyage. But apart from this, it would seem that the Canadian Act under certain circumstances deprives the cargo owner of what is a very valuable protection to him, and one which he should retain unless a strong case is made out to the contrary, as it is difficult to see any reason why the exemption from liability in respect of navigation risks given to the shipowner should be unconditional. It is surely not unreasonable to make it conditional on the exercise on his part of due diligence, as is done by the Harter Act and the Australian and New Zealand Acts.

It is to be hoped that if legislation is hereafter introduced on this subject, it will be framed after consultation with the interests concerned, including besides merchants, shipowners and underwriters, also representatives of banking and the law. This procedure has been adopted with success in other cases, e.g., the Bills of Exchange Act, 1882, and in the United States it is now regarded as an indispensable preliminary to commercial legislation.

In conclusion, the report is a document of great value to those who are interested in the study of the law concerning the carriage of goods by sea, as it gives an insight into the practical application of legal principles to commercial transactions, such as is only too seldom granted to persons who are not themselves actively engaged in business pursuits.

The Present Position of the President of the French Republic.

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Constitutional reform is being widely discussed in France at the present moment, and there is scarcely a feature of the Constitution of 1875 which is not coming in for considerable criticism. It is felt on all hands that the present machinery is ill-suited to the needs of the hour, and that a thorough overhauling is essential to the satisfactory reconstruction which the country needs.[1] Even before the war had laid bare the weaknesses of the system, the position of the President of the Republic had for some time been the topic of much discussion.[2] The apparent ineffectiveness of the President, the way in which statesmen of the first rank were constantly passed over for minor figures of the political world, and the general lack of prestige with which the position was regarded made many people feel that something had gone wrong with the institution, and that its creators would scarcely recognize their work in the figure-head whom the French call " le chef de l'Etat."

The election of M. Millerand in October last may be said to have brought the matter to a head. It will be remembered that he only accepted the position on condition that his election would not entail his practical withdrawal from active political life, but that he would be allowed to exercise an effective control over national affairs ; and in a speech he made at Lyons in March, 1921, he reminded the country of the light in which he regards his office : " Although the Constitution (he said) frees the President from the direct and personal responsibility to Parliament which is laid on the other members of the Government, neither its letter nor its spirit condemn him to be a purely passive person, cloistered in an ornamental isolation. This interpretation of the presidential functions, on which I had been careful to lay stress before I had the honour to be elected nearly six months ago, I have endeavoured to put into execution, without calling forth, to my knowledge, any serious criticism. While working in trustful and constant co-operation with the members of the Cabinet, the President does not merely discuss daily with them important and delicate matters. He is careful to keep in touch with the qualified representatives of public opinion, the first of whom

[1] Cf. Villey, *Les vices de la Constitution française*, 1918 ; Probus, *L'organisation de la démocratie*, 1918 ; Justin, *La responsabilité du Parlement*, 1918 ; Barthélémy, *Le gouvernement de la France*, 1919 ; Dell, *My Second Country, France*, 1920.

[2] Cf. Leyret, *Le Président de la République*, 1913.

are the members of Parliament." Exactly how much direct control these discreet phrases indicate, it is, of course, impossible to say; all that we wish to point out is this revolt against the "ornamental" theory of the Presidency.

In itself, this attitude is no new thing. As far back as 1893, M. Casimir-Périer resigned on the grounds that "the President was devoid of any effective means of direction or control," and in 1899, M. Deschanel, who was chosen in 1919 as being essentially a "safe" man, declared that "the instrument in use was a very imperfect one, and that it was necessary either to change it or to enable the Presidents to use the extensive powers with which they were theoretically armed." Finally, in 1913, M. Poincaré's election was taken as an indication that some change was impending, as it was not considered likely that an active Prime Minister would exchange a position of direct responsibility for one of purely nominal control. But the Parliament of 1893 preferred to accept M. Casimir-Périer's resignation rather than extend his powers, and M. Deschanel was not elected in 1899, but only twenty years later. What M. Poincaré might have done had not the war broken out is entirely a matter of conjecture, but it is to be noted that he was unable or unwilling to keep out of the office of Finance Minister in December, 1913, the last man he would have chosen for the post, M. Caillaux.

The fact is, however, that a figure-head President does not correspond to the historical traditions of French republicanism. When in 1848 it became necessary to build up a republican constitution for France there were two rival conceptions of the office. The first, embodied in what is known as the Grévy amendment, was that of the France of 1792: the sovereign authority was not to be delegated to any individual but was to be exercised by the Cabinet under the direct control of the Legislature. In this way there would be no danger of the Presidency being used as an avenue to a Dictatorship, but on the other hand there would be no outward head to represent France before the world. The conception which prevailed, however, was that borrowed from America, of a President elected by the whole people for a specified number of years, who would be the effective and responsible head of the whole executive. Events showed that Grévy's fears were justified, although it would scarcely be fair to say that the *coup d'état* of 1851 was the inevitable outcome of the system; and when in 1871 France was for the third time called upon to give herself a Republican constitution the problem was a singularly complex one. The Republicans were not in a majority in the assembly, and the restoration of the monarchy was confidently expected as soon as the two branches of the royal family, Bourbon and Orleans, had composed their quarrel and agreed upon a single pretender to the French throne. The Republicans were very chary of repeating the ill-fated experiment of 1848, but the Grévy system had no chance of being accepted by an assembly of monarchical sympathies, to whom the Third Republic was only to be a transition

from Empire to Monarchy. Republicans and Royalists alike easily agreed therefore to take the position of the British Crown as a model ; the Royalists argued that the closer the Republic approximated in its external structure to a constitutional monarchy, the easier a royalist restoration would prove, while the Republicans, not quite knowing which way to turn, were really prepared to accept any system not incompatible with the republican principles, trusting to time to turn into a permanency what many thought to be a temporary expedient.

The theoretical powers conferred by the Constitution of 1875 on the President of the Republic were therefore on the whole very similar to those of our own sovereign ; but the President being elected by the representatives of the people it was felt safe to entrust him with certain functions not expressly given to the British Crown, as, for instance, the right to attend Cabinet meetings, to issue public messages, to have the initiative of laws, to sign foreign treaties with the sole consent of one minister (with certain reservations), to send a bill back to Parliament for further discussion, and to request Parliament to consider the revision of the Constitution. How far those powers were really made ineffective by the necessity for the countersignature of some minister to every decree of the President will be seen later ; what is important is to note that just as the powers of our Sovereign had never been clearly defined, so those of the French President were, in some important particulars, left distinctly vague. For instance, the Constitution does not say whether a President can demand the resignation of a minister, and gives him a much freer hand in the selection of the Cabinet than he has, as a matter of fact, been able to enjoy. The very necessity for a ministerial countersignature is not at all clear : does the countersigning minister endorse full responsibility for the policy embodied in a particular decree, or only for its legality ? Is not the countersignature a purely negative check to prevent unconstitutional measures ? On these important points the Constitution is silent, and it is quite clear that the Presidency was likely to become very much what the first few Presidents made it, the Constitution itself being after all but words to which a great variety of tunes could be set.

The first President, Marshal McMahon, certainly had a policy of his own, and he even seemed to think that his position allowed him to keep in office a ministry which had not got the confidence of the Chamber ; but the general election of 1877 (the only one taking place as a result of a dissolution of Parliament) showed him to have been mistaken, and though he did not resign till 1879, he was henceforward politically helpless. The election of Grévy in January, 1879, really marks the starting point of the presidential system as we know it. The real head of the Republican party was then Gambetta, and had he been chosen there is really little doubt that he would have made the President the effective head of the State by the free use of the powers which the law granted him. But for

a variety of reasons he was not chosen ; strictly speaking, indeed, he refused to let his name go forward, acting, it is said, on the scarcely disinterested advice of Grévy himself ; but we can also discern the beginning of the Republican distrust to elevating a really strong man to a post which is largely outside the immediate control of Parliament.

Grévy then began the tradition of the figure-head president. He repeatedly maintained that, as long as he was in power, there would be no *politique de l'Elysée* in opposition to that of the Cabinet ; and, indeed, it would scarcely have been possible for a man who, in 1848, for fear of a dictatorship, had proposed that there should be no President at all to use his position in any personal way. When he resigned in 1887 at the beginning of his second term of office, the Boulanger crisis was at its height and " Cæsarism " the *bête noire* of the day. As a result the three really strong men—Ferry, Floquet and Freycinet—all failed to be elected, none being prepared to make way for the others, and at M. Clémenceau's suggestion an outsider[1] was chosen in the person of M. Sadi Carnot, whom no one could accuse of personal ambition or, indeed, of much personality.

Carnot continued the Grévy tradition, as he was expected to do. His successor, M. Casimir-Périer, refused to do so and had to resign ; and M. Félix Faure, chosen for the same reasons as Carnot, was only able to add a little to the outward pomp of the office, nothing to its real effectiveness. It may, indeed, be said that all the real leaders of Republican France, Waldeck-Rousseau, Brisson, Méline, Clémenceau, have all at various times been deliberately put aside to make way for men whose names were scarcely known to the man in the street the day before the election. By the end of the century the Presidency had definitely taken its permanent aspect, namely, that of a post going to a man whom the party leaders consider to be "safe"; its holder retires from party politics, and is, indeed, usually chosen for his ability to conciliate people of different tendencies ; it is for this reason that the presidents of the Senate and Chamber of Deputies are always supposed to have a specially strong claim. The complete disappearance of M. Loubet and M. Fallières from public life at the expiration of their term of office, and their refusal to seek re-election, is the best indication of what we may call the orthodox presidential tradition.

In spite of its very evident drawbacks, the system cannot be said to have worked badly on the whole. Why then this revolt which M. Poincaré's election is said to have heralded ?

The discrepancy between the theoretical and the actual powers of the President is undoubtedly one of the factors. What is the use, says the logical French mind, of giving considerable powers with one hand and withdrawing them with the other ? The need for

[1] This was Clémenceau's own expression. Cf. Bodley's *France*, p. 205 (French edition), quoting Clémenceau's *Les Coulisses du Boulangisme.*

the ministerial countersignature has meant, in practice, that the minister, considering himself to be responsible, naturally insists on his own policy being adopted, and the so-called presidential decrees are no more presidential decisions than the King's Speech is really written by the King. In addition to this criticism, it is certain that the fundamental objection to the extension of presidential powers has largely disappeared now that the Republic has lasted longer than any system since 1789, and is no more at the mercy of the *coup d'état* of a Louis-Napoléon or a Boulanger. Besides, the position of France at the present time makes the need for effective leadership very great. In spite of many grumblings the French liked the strong hand of M. Clémenceau during the war. Years ago, that acute observer of French politics, Mr. Bodley, declared that France " had a perpetual need of a master to whom to give herself, of a hero to worship"; and he foretold that "France would need, in order to be guided at the beginning of the twentieth century, a hand as strong as that of the First Consul who controlled her at the beginning of the nineteenth ! "[1]

There is therefore every indication that some change is imminent in the position of the President, and the question is: on what lines ?

Americanize the Constitution, say some. Make the President the responsible head of the executive ; place the Cabinet directly under his control and remove ministers from Parliament so as to deprive the deputies of the temptation to overthrow a ministry for the sake of spoils, and take away from Parliament the election of the President and restore it to the whole people as in 1848 : the objections to that course of action no longer exist.

It is, of course, quite possible that one or more of these suggestions will be adopted independently of the others. It seems fairly certain that no real extension of presidential powers is possible without giving public opinion a much larger share in the choice of a President. On the other hand the direct election of the President has not given America men of a much higher calibre than the majority of French Presidents, and the removal of ministers from Parliament is a measure fraught with very considerable risks, and certainly diminishes the effectiveness of Parliamentary control. But it may pertinently be asked whether extension of powers is really necessary. There are many people who consider that what is needed is not so much a change as a clear definition of what the President may and may not do, the identifying of his legal with his actual powers. Few, indeed, if any, would obtain this identification by the removal from the President of such functions as are now actually exercised by the Cabinet ; this would be, of course, the logical consequence of the figure-head theory, but it would inevitably mean that no one would dream of accepting the Presidency as long as he felt equal to any kind of political activity. It would enormously strengthen

[1] Bodley's *France*, p. 227 (French edition).

the position of the Prime Minister, and would almost be equivalent to a return to the Grévy proposal of 1848. It can scarcely be said to be a practical issue.

Many feel, however, that all that is needed is a measure enabling the President to use the powers which the law gives him. These powers, they declare, are as great as it is safe for one man to exercise. Even with things as they are, a resolute man can do a great deal; and they point to the fact that M. Loubet was able to keep M. Clémenceau out of any office during all the seven years of his presidency; that the President can exercise a very effective control over foreign affairs owing to his treaty-making capacity, and that M. Faure was able to prevent for a long while any re-opening of the Dreyfus case. The Constitution, they say, gives the President a free hand in the choice of his ministers as long as they can command a majority in Parliament; there is nothing to prevent him from initiating policy and winning over the Cabinet to his point of view, instead of his accepting more or less ready-made the decisions of his ministers. A very slight re-adjustment would be enough to make his position perfectly clear and logical; in fact, all that is necessary is to make the ministerial countersignature the mere matter of constitutional form which it was certainly intended to be. All this would probably weaken the position of the Prime Minister, it is true, but it might lead to greater Cabinet stability and to more continuity in policy. The manner of the presidential election might have to be revised and some broadening of the electoral college is probably necessary, without going to the length of direct popular election; and it is also possible that some device for removing an unpopular President, similar to that given in the new German Constitution, would obviate certain difficulties.

While, then, the time has come for a clearer statement of the presidential powers, perhaps together with a slight broadening of these, it should be said that the enormous control which the executive exercises in France over the whole life of the nation makes it very undesirable to entrust very considerable powers into the hands of one man, on the American or any other model. No increasing of the President's powers would be really safe without a vast measure of decentralization which, by restoring local freedom, would make less serious the creation of a more personal executive.[1] The real problem for France is not so much that of the precise form of the executive, or even of the relations between executive and legislative, as that of the control of the executive over the individual by means of the highly centralized machinery over which Parliament has little, if any, control. Until the Frenchman is free to administer his own local affairs—we should say, until the *préfet* is abolished or at any rate removed from his present pedestal—there can be little true

[1] In his speech of March 15th, already quoted, M. Millerand suggests that the Departmental *Conseils généraux*, which have already done good service, might well be given more powers for local affairs.

liberty in France, whatever be the precise functions of the President of the Republic.

APPENDIX.

Presidential powers according to the Constitution of 1875 :[1]

1. He can be re-elected.

2. He has the initiative of laws, concurrently with both houses of Parliament ; he promulgates laws, and sees to their execution.

3. He has the right of pardon.

4. The armed forces are at his disposal.

5. He appoints to all offices, civil and military.

6. He presides over national ceremonies.

7. On the advice of the Senate, he can dissolve the Chamber of Deputies.

8. He can ask Parliament to revise constitutional laws.

9. He can call Parliament for an extraordinary session.

10. He can adjourn Parliament for one month twice in the same session.

11. He can communicate with Parliament by means of messages.

12. Within certain limits of time he can ask Parliament to reconsider any law, and Parliament cannot refuse.

13. He can negotiate and ratify treaties, which are communicated to Parliament as soon as the safety and interest of the State allows.

14. Every act of the President must be countersigned by a minister.

15. The President is not responsible, except in case of high treason.

16. The President cannot declare war without the consent of Parliament.

[1] This appendix is taken from Leyret, op. cit.

Some Recent Contributions to the Study of Public Finance

By Hugh Dalton,

Cassel Reader in Commerce in the University of London.

It is a peculiarity of English economists that, unlike their American, French, Italian and German brethren, they do not write general treatises on public finance. Professor Bastable's *magnum opus* still stands alone, and even it was written in Ireland! It is rumoured, I believe on good authority, that a certain professor in a North of England university is contemplating a book of equally wide scope, but in the present period of uncertainty and rapid change in all that concerns taxation, public expenditure and public debts, it is more difficult than ever before to make such a book at once tolerably realistic and tolerably up to date.

That this sort of difficulty is not, indeed, quite insuperable is shown by Professor Plehn of the University of California, who has just brought out a fourth and enlarged edition of his well-known *Introduction to Public Finance.* This edition is in several respects an improvement on the third, published in 1909. The author has succeeded in giving an excellent condensed account of the most important changes in taxation, particularly in the United States and in this country, during the last twelve eventful years. Some rather sketchy chapters on ancient history, up to the industrial revolution, have been advantageously pruned, for they were too sketchy in the last edition to be of real value and any attempt to expand them would have upset the balance of the book. The discussion of public expenditure has been made a little fuller and takes more account of modern forms of "social expenditure" on education, health, mothers' pensions, etc. But it is still inadequate to the importance of the subject. The weakest part of the book, however, is its analysis of the incidence and effects of taxation, which lacks logical precision and establishes few decisive conclusions. For example, Professor Plehn fails to distinguish between the effects of taxation and the effects of public expenditure when he says that "the position that a general direct tax cannot be diffused is strengthened if the use made of the taxes by the government is beneficial and promotes production" (p. 313).

The failure of English economists to study public finance as a comprehensive whole is due to several causes. One obvious motive to do so is lacking in England, where, so far as I am aware, there is no chair of Public Finance in any university. It is by the occupants

of such chairs in foreign universities that many of the comprehensive treatises have been written. Again, the theoretical study of public expenditure has been neglected in England, even more than elsewhere, owing to the wide prevalence of a rather negative view of the proper economic activities of the State. As an American critic observes, " The older English writers did not need a theory of expenditures, because the theory of government which they held implied a fixed limit to governmental functions." [1] We have not yet outgrown the cramping effect of this tradition, the result of which has been to confine practically all theoretical discussion in the field of public finance to problems of taxation. Even here restrictive forces have been at work, traceable to the habit of the dominant economic school of the late nineteenth century of regarding every problem, which could conceivably be so regarded, as a particular case of the general theory of value and so scarcely worth study on its own account. It is reported that a student once asked a world-famous professor what to read on progressive taxation, and was told that " progressive taxation is not an economic category."

Just lately, however, questions of taxation have been receiving better treatment. No student of public finance can afford to ignore either Professor Pigou's *Economics of Welfare* or Sir Josiah Stamp's *Fundamental Principles of Taxation in the Light of Modern Developments.* Part IV of Professor Pigou's book, a hundred pages out of a total of over a thousand, is devoted to " The National Dividend and Government Finance." It is significant that, in spite of their title, practically the whole of these hundred pages deal with questions of taxes and, rather incidentally, of public loans. Questions of public expenditure, except for repayment of debt, are deliberately set on one side, though elsewhere in the book, in Chapters VII-XI of Part V which deals with " The Distribution of the National Dividend," there are valuable fragments of a general theory of public expenditure. But Part IV is practically confined to the problem of determining the comparative effects on production of alternative methods of raising funds to meet a given expenditure. Sir Josiah Stamp in his Newmarch Lectures for 1919 covers a slightly wider field than this, but there are large tracts of common ground. It is interesting, therefore, to compare the conclusions of these two writers, the one renowned for his powers of exhaustive logical analysis, but so diffident on the administrative side as to protest that, on the " practical issue " of the feasibility of exempting savings from income tax, " it would be unbecoming for an academic student to venture any decided opinion " ; the other primarily a practical administrator and an expert interpreter of statistics who yet enjoys keeping his hand in at economic theory, as another might keep his hand in at tennis—or should we rather say chess ? [2]

[1] Adams, *Science of Finance*, p. 53.

[2] Two verbal slips in Sir Josiah Stamp's book are most conveniently noticed in a footnote, since they do not affect any argument. On p. 68 certain taxes on commodities are called " degressive," where " regressive " is obviously meant. On pp. 172-3

Sir Josiah Stamp has a full and interesting discussion of different tests of individual "ability to pay" taxation. If we take money income as a measure of ability, he shows that adjustments must be made with reference to accounting periods; to certain elements of apparent money income, which should not be assessed to taxation; to certain elements of real income, which, though not received in the form of money, should nevertheless be assessed; to the nature of income, i.e., whether derived from work or from property; and to the domestic circumstances of the taxpaper. He also considers possible adjustments in the light of Mr. Hobson's distinction, developed in his *Industrial System* and more recently in his *Taxation in the New State*, between costs and surplus. Sir Josiah Stamp then winds up this part of his argument by a study of various methods of graduating taxation, so that the diminishing marginal utility of money may be accurately reflected in estimates of the relative ability of different individuals. He then proceeds to consider, first, expenditure as distinguished from income and, second, capital wealth, as alternative measures of ability.

A discussion along these lines, though it leads to many interesting and useful conclusions, is not very satisfactory. For "ability to pay," as conceived by Sir Josiah Stamp and many other less able writers, is an ambiguous, or at least a complex, conception. Three distinct sets of considerations are involved; first, considerations of what is fair or equitable as between different taxpayers; second, considerations of the effects of taxation upon distribution from a purely economic, as distinct from an equitable, point of view; third, considerations of the effects of taxation upon production. It would aid clear thinking and clear exposition to separate these factors sharply in analysis and to reserve the phrase "ability to pay" for the use of popular journalists and orators. Thus, considerations of economic effects on distribution point to the exemption from all taxes of the great majority of the population and very steeply progressive taxation of the minority; considerations of effects on production point to a much lower level of exemption, to the desirability of heavy taxes on alcohol and tobacco and, in view of the danger of checking work and saving, to much less steep progression on the higher incomes; considerations of equity probably point to some intermediate arrangement. Similarly, the effects of various kinds of public expenditure are best regarded in the same threefold aspect and balanced against the effects of taxation, and of other methods of raising public income. Professor Pigou also makes occasional use of the phrases "ability to pay" and "taxable capacity," when arguing, on grounds of equity, for differentiation in favour of "earned" incomes and for the introduction of family allowances into schemes of income tax. But such arguments are

there is a confusion between the principles of least aggregate sacrifice, equal sacrifice, and equal marginal sacrifice. Sir Josiah writes as though the second and third of these principles were equivalent and the first distinct. In fact, of course, the first and third are equivalent and the second distinct.

always subordinate in his discussion to the consideration of effects on production.

What has been said above may be further illustrated by the treatment of "windfalls" by the two writers. Sir Josiah Stamp says, "It is a normal thing to settle a man's 'ability' by looking at his regular income, but if something comes along for him which is over and above his ordinary expectations, and is therefore an 'extra' in relation to his normal standard of life—especially if it is unexpected or undeserved—such a receipt is supposed to possess a peculiarly high degree of 'ability'" (p. 59). He goes on to connect this doctrine with Mr. Hobson's, since such receipts are "not required or essential in order to provoke or sustain any economic effort or sacrifice," and thus "possess in the abstract a higher degree of 'ability to pay' than corresponding amounts of regular income or capital." But there are two distinct notions here. It is the unexpectedness of a windfall which justifies its taxation from the point of view of production; it is its supposed undeservedness which justifies its taxation from the point of view of equity. Professor Pigou concentrates attention upon the former of these two ideas and argues that taxes on windfalls have special merits from the point of view of production, since there can be no expectation of a tax on what is itself unexpected, and hence no resulting check to work or saving, and no uneconomic diversion of resources from one channel to another. He treats the British excess profits duty at its inception as, substantially, a windfall tax, though evidently this quality became less marked with the lapse of time and the continuance of the tax. But he points out that "the original American excess profits duty," being "based on the absolute rate of profit, and not on the excess above the profits obtained before the war . . . was much less nearly a true tax on windfalls than the English tax" (p. 602). Both writers deal at some length with the difficulties of devising permanent windfall taxes and draw numerous illustrations from the details of taxes on land values. Sir Josiah Stamp remarks that "the term 'windfall' was first actively used in platform rhetoric in connection with the 'increment value duty,'" but I fancy that, in fact, it originated in a letter from Professor Pigou to *The Times* during the controversy about this duty in 1909.

Professor Pigou argues that, from the point of view of production, savings should be exempted from income tax in the year in which they are made, or, in other words, that an expenditure tax is preferable to an income tax. For, he contends (p. 629), an income tax differentiates against saving, since "it strikes savings both when they are made and also when they yield their fruits." Thus an "income tax at the rate of x per cent. strikes the part of income that is spent at this rate. But" on savings "the effective rate of tax per cent. is $x\left(2-\frac{x}{100}\right)$," and so, "for example, a general rate of 10s. in the £ implies a tax, not of 10s. but of 15s. in the £ on saved income."

Similarly, a rate of 4s. in the £ implies a tax of more than 7s. in the £ on savings. Sir Josiah Stamp criticizes this argument as follows (p. 58): "An alternative method of giving effect to the principle suggested would be to exempt from income tax, not the savings themselves, but the income from savings in subsequent years, at any rate during the lifetime of the saver." This, of course, would be a partial inversion of the ordinary differentiation in favour of income from work, as against income from property. But, Sir Josiah Stamp proceeds, "There is no reason why the income earned from 'waiting' or 'abstinence' should not be charged like any other income. You might as well exempt those elements of a large dividend which are the reward of risk taking." He goes on to observe that, in his opinion, "what is really intended by those who talk of the discrimination against saving" in the ordinary income tax is that further accumulation of capital is so desirable that taxation should discriminate in favour of saving. "The claim is really to favour saving rather than to remove a burden on it."

These criticisms do not really touch the spot. To exempt income derived from savings is, no doubt, equivalent to exempting savings themselves, from the point of view of removing the discrimination against savings to which Professor Pigou refers. Sir Josiah Stamp's scheme would, of course, involve the exemption of large dividends along with small. His scheme appears less reasonable, at first sight, than Professor Pigou's, because it is based on a consideration of the source from which income is derived rather than of the use to which income is put. But this does not get over the fact that an income tax, from which neither savings nor income from savings are exempt, does discriminate against saving and in favour of spending. Professor Pigou's argument on this point is logically irrefutable. But its practical importance is difficult to estimate. Sir Josiah Stamp elsewhere[1] makes a criticism against some of Professor Pigou's conclusions, that they impute to the average taxpayer too rational and actuarial a psychology. This criticism is to some extent applicable here. Not everyone—to put it mildly—who is in doubt how much to save, will envisage the discrimination of an income tax against savings. Not everyone, therefore, will be influenced in his decision by this discrimination.

The same criticism is still more strongly applicable in other cases. "If," says Professor Pigou, "effective rates of taxation on total incomes are graduated very steeply, the rate on increments of income at some points is liable to be much greater than the rate on aggregate income. If, for example, the effective rate on £2,000 was 6s., and on £2,100 6s. 6d., a £2,000 man, who by extra work added £100 to his income, would have to pay on the £100, not 6s. 6d. but 16s. 6d. in the £; and it is this rate that is really relevant to his

[1] *Statistical Journal*, March, 1921, pp. 284-5.

decision whether or not he shall undertake the extra work " (p. 638). Mathematically, this is indisputable. But how many income taxpayers would work the problem out correctly on these lines and base their action on the result ?

How much allowance should be made in different cases for the imperfect mathematical apprehension of taxpayers is a difficult question. But that some allowance should frequently be made is clear. In the two cases referred to above the effect of making such an allowance will be beneficial to production. But in other cases the allowance will work the opposite way, in the earlier stages of a capital levy, for instance, if the opponents of such a policy systematically play upon the nervous fears and intellectual frailties of large sections of the business world.

Sir Josiah Stamp analyses motives to saving more minutely than Professor Pigou, believing that " the whole fund of saved capital is a resultant of many different psychological factors, which do not answer in the same way to changes in conditions " (p. 153). His analysis is interesting and leads him to conclusions rather different from Professor Pigou's on the effects of death duties and the capital levy. On this last topic both writers are well worth reading, and the student of this problem should read also Professor Pigou's little book on *A Capital Levy and a Levy on War Wealth* (Oxford University Press), Sir Josiah Stamp's review of this book in the March *Statistical Journal*, and the recent Labour Report on *Taxation and the Cost of Living*. This Report, by a committee before which both Professor Pigou and Sir Josiah Stamp gave evidence, contains the most detailed scheme yet published in this country for putting the levy into operation. Professor Pigou comes down with both feet in favour of the levy, but Sir Josiah Stamp is rather dubious. In *The Economics of Welfare* Professor Pigou leads up to this subject by a discussion of the comparative effects, on production and distribution, of loans and taxes as sources of public income. The general conclusion of an elaborate and subtle inquiry is adverse to loans on both counts. Then follows the argument for a levy. This should, in his opinion, be assessed on the total material wealth of individuals, according to a graduated scale, and should be supplemented, in order to satisfy equity, by a subsidiary levy on incomes from work. The total yield of the levy should be sufficient to wipe out a large proportion of the internal debt. From the point of view of production, he argues, " there can be little doubt that its adoption would be advantageous, because the obstructive effect of the expectation of higher annual taxes, which strike new effort and savings, would be lessened. This consideration holds good even if the levy is payable in instalments spread over a number of years, so long as the amount of the instalments depends on the amount of property held when the law is passed, and not on the amount held when each instalment is paid " (p. 678). He then considers the problems of valuation and collection and concludes that their difficulty has been exaggerated

and that they are capable of practical solution. Sir Josiah Stamp's view is that, from the administrative standpoint, the crucial cases are "in the valuation, the trust and life interest, and in the collection, the reversion and the private business" (p. 95). But he adds that, "if a tax is believed to be practicable over a considerable part of the field to which it is to be applied, and the impracticability is confined to a minor part, most States will embark upon the scheme, and by a sacrifice of logical principle at the point of difficulty and the adoption of a few conventions, will satisfy the equities roughly" (p. 97). His analysis of the motives to saving, already referred to, leads him to the conclusion that on about "35 per cent. of the savings there would be a balance in favour of the levy, not quite counterbalanced by the disadvantage on a smaller section, with a large part indeterminate" (p. 162). But if the levy is very steeply graduated and so causes a diminution in the inequality of incomes, "the saving power of the community as a whole is diminished, and even if the lower taxation produced subsequently on account of the levy method gives a slight balance of advantage in the incentive to saving out of the future incomes as so redistributed, that balance is hardly likely to outweigh the damage done to total saving power by the redistribution itself" (p. 164). This, of course, is an argument, not merely against the levy, but against a less unequal distribution. Sir Josiah Stamp appears to regard a tax on business profits as an alternative to the levy. But it is not clear why a permanent tax on this basis should be preferable to permanent income tax and death duties.

Another book of which mention should be made is Mr. Sidney Webb's *Grants in Aid: a Criticism and a Proposal*, a new edition of which has just appeared. In the first edition, published in 1911, attention was drawn to the chaotic condition of grants in aid from the national exchequer to the local authorities and proposals were made for their reform. In the intervening period both the expenditure of local authorities and the total of grants in aid have greatly increased, while chaos is as great as ever.

Mr. Webb regards the grant in aid as a valuable instrument, not only for diminishing local inequalities in the burden of taxation, but also for encouraging socially desirable expenditure and securing efficiency in the performance of their duties by local authorities. He considers that it is a device which may give us "a remarkable combination of liberty and efficiency," a half-way house between bureaucratic central control and "the anarchy of local autonomy." He rejects the distinction often drawn between services of national, and services of only local, importance, but arrives by a different route at the familiar practical conclusion that the chief services, for which grants in aid should be given, are education, police, and provision for the sick and infirm and for lunatics. He recommends that the total payable in grants in aid should be fixed for periods of seven years—surely a rather inelastic arrangement—starting

at the present figure of about 50 per cent. of the total expenditure of local authorities on the grant-aided services. But he would make the grant to any particular local authority variable according to its efficiency and its poverty, as measured inversely by rateable value per head of population. Few will doubt that reform along the broad lines suggested by Mr. Webb is very desirable. But there is ground for differences of opinion on details. How, for example, is the relative efficiency of different authorities to be measured? Mr. Webb would give large discretionary powers to government departments to decide this question. It might be argued that some of the simpler objective measures now in use would be preferable, such as actual expenditure in various prescribed directions, e.g., on teachers' salaries. A point, to which Mr. Webb does not refer, but which has a bearing on the matter, is the respective merits of the prevailing systems of national and local taxation. The better the former system and the worse the latter, the stronger the case for paying an increased proportion of the cost of any particular service out of grants in aid. It is, therefore, relevant to observe that our present system of local taxation has two very objectionable features. Local rates are, to a large extent, a tax on houses and thus discriminate against building. And, in so far as they fall on occupiers, they are a form of regressive taxation. Our national system of taxation, on the other hand, is now, for the most part, distinctly progressive and, in so far as it discriminates, most of its discriminations are less harmful. More and better houses are preferable to more alcohol and tobacco and even, perhaps, to more tea and sugar. This is an argument, within limits, for larger grants in aid in preference to higher local rates. A logical alternative is, of course, an improvement in our system of local taxation. But, apart from the slight improvement which might result from allowing, or compelling, local authorities to tax site values, there are serious practical difficulties in the way. For, as Sir Josiah Stamp puts it (p. 21), " the necessary failure of all local administration to handle subjective taxation, owing to the fact that wealth becomes more and more widespread and elusive, has led to a greater reliance of local taxation upon real or specific taxes," at a time when national systems of taxation are changing in the opposite direction.

School Notes

THE total number of regular (i.e., full-time) students enrolled for the Session 1920-21, up to April 25th, is 973, of whom 351 are reading for the degree of B.Sc. (Econ.), 238 for the degree in Commerce, and forty-five for higher degrees, such as D.Sc., Ph.D., and M.Sc. There are, in addition, 1,787 occasional or part-time students, including fifteen students who are doing research work not leading to a higher degree. The total number of students is, therefore, 2,760.

GLADSTONE MEMORIAL PRIZE

The Gladstone Memorial Prize for 1920 has been won by A. Dane and A. B. C. Davison. The prize, which is awarded annually to the student who, at the School's Special Intermediate Examination in the Faculty of Economics, shall have obtained the best aggregate marks for the papers in Economics and British Constitution, is of the value of £5 in books. In view of the exceptional circumstances the Trustees of the Gladstone Liberal Memorial Trust, on being approached by the School consented to double the amount of the prize, for this year only, dividing it between the two winners.

STUDENTSHIPS

Two Research Studentships available for two years are due to be awarded in July, 1921, one for £175, and one for £75, if suitable candidates make application. Candidates should apply to the Secretary for a form of application not later than June 18th.

The Hutchinson Research Studentship, of the value of one hundred guineas a year for two years—originally the gift of the Constance Hutchinson Trustees—will be awarded by open competition in July, 1921. This studentship, which is tenable for two years, will be awarded annually, when possible without examination ; but the Committee of Award reserves to itself the right to set papers to selected candidates if such a course is considered desirable. The successful candidate will be expected to choose, with the approval of the Director, some definite subject for research of limited scope.

Candidates should apply to the Secretary for a form of application not later than June 18th.

In the event of an examination being required, two papers will be set on June 30th, 1921, at 10 a.m. and 2 p.m., respectively ; one on Economics or Political Science at the option of the candidate ; and a general paper so framed as to test the candidate's knowledge of both Economics and Politics. In Economics there will be questions in General Economics, including Economic History, Methods of Investigation and Applications of Statistics ; in Political

Science there will be questions on the History of Political Ideas, Comparative Politics and the British Constitution.

The Committee of Award will meet after the examination to interview selected candidates.

NOTE.—The Research Studentships of the London School of Economics and Political Science are intended to promote the execution of definite pieces of original work relating to either past or present economic or political conditions and to enable students to become trained investigators.

The successful candidates are expected to devote their whole time to their work, attending for this purpose at the School or carrying on their researches in such fields of investigation as may be required and approved. They choose, subject to the approval of the Director, some definite subject of investigation of limited scope, which they are assisted, under competent direction, to study at first hand with a view to the preparation of a short monograph. Their first task is to perfect themselves, under expert direction, in the methods of investigation and research.

Books Received

DR. ALFRED MARSHALL: *Industry and Trade.* Macmillan and Co. 18s. net.

PROF. A. C. PIGOU: *Economics of Welfare.* Macmillan and Co. 36s. net.

SIR J. C. STAMP: *Fundamental Principles of Taxation.* Macmillan and Co. 10s. 6d.

PROF. C. C. V. PLEHN: *Public Finance.* Macmillan and Co. 18s.

PROF. SIDNEY WEBB: *Grants in Aid.* Longmans, Green and Co. 10s. 6d.

R. H. TAWNEY: *The Acquisitive Society.* G. Bell and Sons, Ltd. 4s. 6d. net.

C. L. GOODRICH: *The Frontier of Control.* G. Bell and Sons, Ltd. 7s. 6d. net.

DR. J. H. CLAPHAM: *Economic Development of France and Germany.* Cambridge University Press. 18s.

JOHN LEE: *Plain Economics.* Pitmans.

DR. J. B. HURRY: *Poverty and its Vicious Circles.* J. and A. Churchill.

Miss M. C. BUER: *Economics for Beginners.* Routledge. 4s. 6d. net.

W. DRURY: *The Significance of Transport in the Production of Wealth.* F. Hodgson. 1s.

Periodicals Received

The Bombay Co-operative Quarterly.
Political Science Quarterly.
La Revue de France.
The International Trade Union Movement.
The Sociological Review.
Giornale degli Economisti.
Journal of the Royal Statistical Society.
Reconstruction (Vienna).
Progress (Melbourne).

Changes in the Standard of Living in the United Kingdom, 1860-1914

By Miss W. A. Mackenzie.

[Note.—This paper has been developed as the result of a seminar at the School of Economics, which was given up on the dispersion of its members during the war; it had been hoped that a wider treatment in which several persons took part would be possible; as it is, the investigation of the changes in housing, clothing, and expenditure generally on commodities other than food has not been carried beyond a preliminary stage.—A. L. B.]

The title of this paper, widely interpreted, includes many subjects which the writer has excluded from inquiry, partly from lack of material, partly from lack of time to handle effectively the data which exist. The main object of the paper is to state the change which has taken place in the standard of living, as measured by the calorie value of food consumed, of the population of the United Kingdom, between 1860 and 1914; *it is not confined to the working-classes.*

It was felt that the description of an average family would give but a very inadequate conception of the change in different sections of the community. Hence it was decided to locate the median and quartile families in 1860, 1880, and 1914, and describe the change which has taken place in their standard. To do this, the median and quartile incomes of the heads of households in the United Kingdom were estimated. Retail prices of the principal articles of food were then determined as accurately as the scanty data would allow. The consumption of imported commodities was obtained, and estimates made of the home production. From the data thus collected hypothetical budgets were constructed to show the possible standard attained by each representative family in each of the three years 1860, 1880 and 1914.

Owing to the scarcity of data available no attempt at a quantitative measure of the changes has been made. The most one could hope for was to obtain an indication of the magnitude of the rise which has undoubtedly taken place in the standard of living of all classes.

INCOME

The information available concerning the distribution of the income of the United Kingdom is too scanty to allow one to proceed directly to the calculation of the median and quartile incomes in any special year. This is even more true of the earlier than of the later years. An indirect method of arriving at these values, there-

fore, has been devised: the median and quartile adult men's wages in the three years 1860, 1880 and 1914, have been estimated as described below. The number of income-tax payers (i.e., those with incomes over £160) and the number of intermediate incomes in each year have been taken into account, and from the combined information the median and quartile incomes of the heads of complete households in the United Kingdom have been estimated.

The chief sources of information concerning wages are the wage censuses of 1886 and 1906, and these form the safest basis for any wage estimates. From the data given in the earlier census, Dr. A. L. Bowley determined the median and quartile wages of adult men in 1886.[1] Using this, one can work backwards to 1880 and 1860, partly by means of index numbers, and partly by general knowledge.

The various index numbers for wages agree in indicating practically no change in the average wage between 1880 and 1886 and therefore the median wage of 1886 has been carried back unaltered as the median wage of 1880. The lower and upper quartile wages at the later date represent approximately the wages of a bricklayer's labourer and a bricklayer respectively. According to the index numbers for several industries given in the article on "Wages" referred to above, wages in the building trade were stationary during the six years. On the other hand, engineering wages increased slightly between 1880 and 1886. As approximations to the real values, therefore, the lower quartile wage has been carried back unaltered over the six years, and the upper quartile has been reduced from 28s. 9d. to 28s. per week.

It is a far more difficult matter to carry the figures back over twenty years to 1860. Several index numbers have been constructed to show the change in the general level of wages between 1860 and 1886. In obtaining the median and quartile wages for the earlier year, use has been made, first, of Mr. G. H. Wood's index number for an unchanged grade, which gives the average increase over the twenty-six years as 20 per cent. Reducing the 1886 median wage by 20 per cent. we get 20s. as the corresponding wage in 1860. But this index number makes no allowance for change in the relative numbers employed at the two dates. In his article in the *Encyclopædia Britannica*, Dr. A. L. Bowley gives an estimate of the average increase in wages in certain specified industries between 1860 and 1880. This increase (viz., 32 per cent.) allows for changes in the relative numbers. Applying this index number to the median wage of 1886, we obtain 18s. 4d. as the median wage of 1860. In 1867 Baxter estimated the average wage of adult males in England and Wales as 17s.[2] It seems, therefore, that the median wage of 18s. is likely to be nearer the true value than 20s. Applying these same index numbers to the quartiles for 1886, we obtain 16s. 6d.

[1] Article on Wages, *Encyclopædia Britannica*, 1902.
[2] Quoted by Dr. Bowley in *Wages in the 19th Century*.

and 24s. from Mr. Wood's estimate, and 15s. and 21s. 9d. from Dr. Bowley's. This method assumes that all grades of labour received the same rate of increase throughout the period. For nearly one hundred years, the wages of the bricklayer's labourer have been two-thirds the wages of the bricklayer. If this relation holds true for all unskilled and skilled wages, and for the early years, the above method would give a good approximation to the real values, especially those obtained from the index number allowing for changes in relative numbers.

In his examination of British wages,[1] Dr. Bowley draws attention to the fact that the quartiles are respectively four-fifths and five-fourths of the median. Assuming this relationship held good for the United Kingdom in 1860, we obtain 14s. 6d. and 22s. 6d. as the quartiles for that year. These lie well between the estimates obtained above, and have been adopted as the best estimates for the purposes of the present paper.

The wage census of 1906 makes the calculation for 1914 rather easier. In 1915, Dr. A. L. Bowley made an estimate of the distribution of adult men's wages in the United Kingdom in 1906, from the data given in the census of that year. From this estimate, the median and quartiles were located, and adjusted for 1914 by means of an estimate of the increase in average money wages during the eight years (which was given by Dr. Bowley in a series of lectures delivered at the London School of Economics in 1919), and assuming the same relationship as above, to obtain the quartiles. The figures obtained agree very closely with those given by Dr. Bowley in the same lectures, viz., 38s., 31s., and 25s. 6d.

ESTIMATED ADULT MEN'S WAGES IN THE UNITED KINGDOM.

	1860.	1880.	1914.
	s. d.	s. d.	s. d.
Upper Quartile ...	22 6	28 0	39 4
Median	18 0	24 3	31 6
Lower Quartile ...	14 6	20 0	25 2

The next step is to adjust these positions for income, and this means taking into account the number of income-tax payers and intermediate incomes.

Dr. Stamp[2] has estimated the number of income-tax payers in 1860 in receipt of an income over £160 as 280,000, and the number in receipt of incomes between £100 and £150 as 160,000, making approximately 450,000 in receipt of incomes over £100. Baxter, in 1867, estimated the number of intermediate incomes (i.e., under £100) as 1,497,000. The census of 1861 gives the number of occupied males over 20 years, in the United Kingdom, as 7·5 million.

Assuming, for the moment, that all the income-tax payers and receivers of intermediate incomes were adult men, we have 5·5 million adult male wage earners in 1860.

[1] Article in *Encyclopædia Britannica*. [2] *British Incomes and Property*, p. 448.

The corresponding numbers for 1880 and 1913 are given in *The Change in the Distribution of the National Income*, 1880-1913, by Dr. Bowley, and are shown in the following table:

NUMBER OF INCOMES.

	1860. Thousands.	1880. Thousands.	1913. Thousands.
Manual Wage Earners	5,500[1]	12,300	15,200
Intermediate Class (with incomes less than £160)	1,700	1,850	4,310
Assessed to Income Tax	280	620	1,190

These figures include supplementary earners, but in the present paper we are only concerned with the heads of complete households. The above numbers, therefore, must be reduced according to the number of households in the United Kingdom at the time, viz., 6 million, 7 million and 10 million in 1861, 1881 and 1911, respectively. In reducing the numbers it has been assumed that each taxpayer was the head of a household. This was probably true at the two earlier dates, and was not far from the truth in 1914, for the number of families with two income-tax payers contained the exceptions and not the rule. A large proportion of the intermediate class are supplementary earners and must be ignored. The proportion of such earners at the three dates is not known, but it has been assumed that it has been an increasing proportion. As a rough estimate, two-thirds of the intermediate class in 1860 have been taken as householders, one-half in 1880, and one-sixth in 1913. The number of wage-earning householders was then obtained, by finding how many census families still needed a head, after allowing for broken households.

ESTIMATED NUMBER OF HEADS OF HOUSEHOLDS.

	Number of Householders.		
	1860.	1880.	1914.
	Thousands.	Thousands.	Thousands.
Income-tax Payers	300	600	1,200
Intermediate Incomes	1,000	900	700
Wage Earners	4,500	5,000	7,100
	5,800	6,500	9,000

The median and lower quartile incomes of adult males in the United Kingdom were found from the corresponding wage figures by interpolation.

For example, the median and quartile wages in 1914 were found to be 31s. 6d., 25s. 2d., and 40s. respectively. There were 7·1 million wage earners at that time, so that 3·55 million householders in the

[1] Male wage earners only.

United Kingdom were receiving less than 31s. 6d., 1·78 million less than 25s. 2d., and 5·33 million less than 40s. 2d. Taking all heads of households into consideration, we want to know the wage earned by the 2·25, 4·50 and 6·75 millionth men respectively. The new wages were calculated on the assumption that the earners of income were equally distributed throughout the grade, i.e., that the lower quartile for all incomes was 25s. 2d. $+ \frac{2{\cdot}25-1{\cdot}78}{3{\cdot}55-1{\cdot}78}$ of 6s. 4d. = 26s. 10d., and similarly for the median.

The paucity of data regarding the distribution of the intermediate income made the upward movement for the upper quartile more difficult. A glance at the numbers in the table immediately above, shows that the upper quartile is situated in the wage-earning group. But the lower incomes of the intermediate class and the higher wages of the wage-earning class overlap in this group, and consequently both classes of earners must be taken into account. For each year under consideration an estimate exists of the average income of the intermediate class; it has been assumed that this was also the median income of that class. Baxter's estimate of the average intermediate income (under £100) in 1867 was £54 per annum,[1] or 20s. 9d. weekly. Even allowing for the small salaries of supplementary earners, something less than half the intermediate incomes are at or below the upper quartile wage. Assuming 500,000 intermediate incomes are in this group, we get 27s. 2d. as the upper quartile, and 20s. as the median in 1860. Or, assuming that the whole million intermediate incomes lie within the grade 22s. 6d. (the upper quartile wage) and 38s. 6d. (the upper limit of the intermediate class), we get instead 28s. 6d. and 20s. 6d. as the median and upper quartile respectively.

The average intermediate income in 1880 has been estimated as £70.[2] Raising this to 34s. a week to allow for supplementary earners, we have 5·45 million earning under 34s. per week, and 3·75 under 28s., assuming that the intermediate incomes below the median all lie between the median and the upper quartile wage. On this hypothesis the upper quartile income is found to be 32s. If we assume that about one-quarter of the intermediate incomes are between the upper quartile and median wage, the corresponding positions for income become 31s. 7d. and 26s. 3d. instead of 32s. and 26s. 6d. respectively.

The Report of the Committee of the British Association, 1910, gives the average income of men and lads in the intermediate class as £87 at that time. Allowing for supplementary earners and adjusting the estimate for 1914, the average intermediate income before the war may be put at 40s. per week, i.e., the upper quartile wage was about the same as the median intermediate income. Assuming the upper quartile income to be half-way between the median and £160 per annum (viz., 50s. per week) and that all wage

[1] Bowley, *Changes in the Distribution of the National Income*, p. 11. [2] *Ibid.*

earners are getting less than the upper quartile income, we have 7·6 million receiving less than 50s., 5·67 less than 39s. 4d., and 3·55 less than 31s. 6d. Hence the upper quartile and median incomes for 1914 are found to be 45s. 3d. and 35s. respectively.

In studying only the medians and quartiles, it will be noticed that we are overlooking an important section of the community, namely, the agricultural labourer. According to the census of 1861, 18 per cent. of the population in England and Wales were engaged in agriculture. Hence the first decile measured from the bottom for 1860, would be rather below the average agricultural labourer's wage. The average earnings of an agricultural labourer in the United Kingdom in 1860 were 13s. 6d.,[1] so that 12s. 6d. or 13s. would represent the first decile. In 1880, the corresponding position would be nearer the top of the agricultural class, since 11 per cent. of the population in England and Wales were engaged in that work. This would make the first decile about 17s. For 1886 Dr. Bowley[2] gives the lowest decile as 16s. Allowing for the decrease in agricultural wages between 1880 and 1886, this would be equivalent to about 17s. in 1880.

Rather less than one-tenth of the population were engaged in agriculture in 1911, so that one would expect the lowest decile to be quite at the top of agricultural work, and at the bottom of unskilled work. The lowest decile for 1914 was obtained in the same way as the lower quartile and median from the estimated distribution of wages in 1906, and was found to be 20s. 6d.

Estimated Income of Heads of Households in the United Kingdom in 1860, 1880 and 1914.

	Income.		
	1860.	1880.	1914.
	s. d.	s. d.	s. d.
Upper Quartile ...	27 6	32 0	45 3
Median	20 6	26 6	35 0
Lower Quartile ...	15 6	21 4	26 10
Lowest Decile ...	13 0	17 0	20 6

These figures are necessarily rough, but are sufficiently accurate to serve as a guide in estimating the upward progress of the population. Various distributions of the heads of households have been tried, but the greatest difference that has been made in the results has been a difference of 1s. The incomes given above, therefore, may be taken as correct to within that amount. It will be noticed that the median of 1860 is about the same as the lower quartile in 1880 and the lowest decile in 1914. Similarly the upper quartile of 1860 is roughly the same as the median of

[1] Bowley, *Statistical Journal*, 1899.
[2] Article on Wages, *Encyclopædia Britannica*, 1902.

1880 and the lower quartile of 1914. Referring back to the table on page 225 showing the number of householders in each class of income, we see that the ninth decile from the bottom in 1860 included about one-third of the intermediate incomes. In 1880, the same decile included only a few of the highest intermediate incomes, while in 1914 the corresponding position falls within the income-tax paying class.

The following table gives an indication of the type of man who represents the median and quartile families of the United Kingdom:

	1860.	1880.	1914.
Upper Quartile...	Ordinary Semi-Skilled.	Top of Semi-Skilled.	Skilled.
Median	Top of Unskilled.	Average Semi-Skilled.	Top of Semi-Skilled.
Lower Quartile ...	Bottom of Unskilled.	Average Unskilled.	Top of Unskilled.
Lowest Decile ...	Average Agricultural Labourer.	Top of Agricultural Labourers.	Bottom of Unskilled.

PRICES

Although there is a good Index Number of Wholesale Prices, which takes us back to 1860, there is no corresponding number for Retail Prices, but in the present enquiry it is the latter with which we are chiefly concerned. Our chief difficulty is, that not only does an index number not exist, but the data upon which such a number could be based are practically non-existent.

The actual records of prices in 1860 are very few indeed: for urban districts, two series have been found which relate to the year 1859, and two to 1860; and for rural districts, two series for 1860, one of which is semi-wholesale.

RETAIL PRICES OF COMMODITIES SINCE 1860.

Commodity.	(1) Manch'r. 1859.	(2) London 1859.	(3) London 1860.	(4) Stafford 1860.	(5) Salop 1860.	(6) Cumb'd 1860.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Bread ... 4 lb.	0 5½	0 6½	0 6¾	0 5½	—	—
Flour ... 1 ,,	0 2	—	—	—	0 2	2 2 st'ne
Rice ... ,,	0 3	—	—	—	0 1½	—
Meat ... ,,	0 6½	0 7½	0 8	0 7½	0 5½	—
Bacon ... ,,	0 8	1 0	1 0	0 8½	—	—
Potatoes ... 20 ,,	1 0	1 3½	1 5	—	—	—
Milk ... qt.	0 3	—	0 4	—	—	—
Butter ... lb.	1 1	1 0	0 10	1 4	1 1	—
Cheese ... ,,	—	0 8	0 8½	0 8¼	0 4¾	—
Tea ... ,,	4 0	4 0	4 0	4 6	3 4	4 0
Coffee ... ,,	1 4	1 8	1 8	1 4	1 3	1 7
Sugar ... ,,	0 5	0 5	0 5	0 5½	0 4½	0 5½

The prices given in column (1) are deduced from the budget given by David Chadwicke in his paper read before the Statistical Society in 1860. Being a contemporary statement, we may assume that the prices are, at least, quite close to the truth as far as Manchester is concerned. The London prices in columns (2) and (3) are taken from the *Report upon Wholesale and Retail Prices* [H. of C. 321, 1903]. The prices chosen are those which are based upon the bills and returns of certain householders—except in two cases—on the ground that such prices are more likely to approximate to the prices required in this investigation than the prices paid by clubs or hotels. The two exceptions are bacon and milk: the prices for bacon are those given in the Master's House Account, Grey Coat Hospital, Westminster, and are the ordinary retail prices, no reduction being made for quantity; the milk price is based upon returns made by dairy companies. Although the price for tea is given as 4s. per lb., it may be pointed out that the Grey Coat Hospital was only paying 3s. 8d. per lb. for "fine mixed," at the same dates, viz., 1859 and 1860. This was also the price paid by one of the principal London hotels. As regards coffee, the price paid by one of the principal hotels in 1859 and 1860 was 1s. 4d. per lb. (as compared with 1s. 8d. from the householders' returns)—the price given for Manchester and Stafford. The figure for sugar refers to crystallized; from the evidence one has been able to collect, it appears that lump sugar was about 1½d. per lb. dearer.

The figures in column (4) were obtained from Brassey's *Work and Wages*, in which he gives a statement of the retail prices of provisions in Stafford, extracted from the books of a grocer and general dealer. The two last columns were obtained from the same source, viz., the *Report of the Royal Commission on Labour*, 1892 [Cd. 6894]. The Shropshire prices are semi-wholesale, being the prices paid by the Atcham Union Workhouse. The figures in column (6) are from the books of a village shop in the Union of Wigtown.

The paucity of data for the earlier years of the period under review led one to consider the possibility of determining the general level of retail prices in 1860, from one of the index numbers for wholesale prices. An attempt was made to obtain a retail price index number for 1860 by finding in which year, during the rise from 1896-1913, wholesale prices, as measured by Sauerbeck, reached the same level as in 1860. This attempt was doomed to failure, for in 1914 the general level of food prices was still below that of 1860. It was found, however, that several of the commodities had passed through their 1860 level during the decade prior to the war. For only one of these commodities—bacon—was it possible to obtain the retail price for that special year, so the following method was adopted: the predominant price paid by the working-class in eighty-eight towns was taken from the *Cost of Living Report*, 1912, and the price in the special year required was obtained by means of the index numbers for individual commodities given in the same report.

Example: The wholesale price index number for butter in 1860 was found to be 90, and this level was approximately reached in 1909. The predominant price paid by the working classes in eighty-eight towns of Great Britain in 1912 was 1s. 3d. The retail price index number for butter is given in the *Cost of Living Report*, 1912, as 111·1 in 1912 and 102·7 in 1909. The retail price of butter in 1909 was obtained by reducing the 1912 price in the ratio 102·7 : 111·1, and this is taken as approximately the retail price in 1860. No prices were quoted in the Report for rice and coffee: the figure for the former is based upon the price used in the 1904 budget, and that for the latter is an estimate of the price about 1910.

The accuracy of the prices obtained by this method depends largely upon the relation between wholesale and retail prices. This subject has been dealt with by Dr. A. L. Bowley in the *Economic Journal*, 1913, where he analyses the various factors which influence the final price of an article, and which operate between the purchase in the wholesale market and retailing in local shops. If the influence of these factors remained unchanged, whether they produced an additional absolute or percentage charge, one would expect the retail price to be the same whenever the wholesale price was the same.

RETAIL PRICES IN 1860, OBTAINED FROM SAUERBECK'S INDEX NUMBER

Commodity.	Sauerbeck's Index No. 1860.	Year in which approx. same level was reached	Retail Price in that year.
			s. d.
Beef...	84	1907	0 7½
Mutton	91	1904	0 7½
Bacon	92	1912	0 10½
Pork...	104	1910	0 9¼
Rice...	102	1912	0 3
Butter	90	1909	1 2
Coffee	78	1910	1 4

It will be noticed that the commodities in the above table pass through no process of manufacture before being sold retail. This being the case, practically only cost of transport and of retailing would require to be added to the wholesale price to obtain the retail. In the above method, it has been assumed that the proportion these costs bear to wholesale prices was the same in 1860 as in the years before the war. In so far as this assumption is justified, the prices should represent approximately the prices in 1860. Comparing the prices in the above table with those in the table given at the beginning of this section, we see that the calculated series show a marked agreement with the actual records.

Passing on to prices in 1880, we find that information for that year is even scarcer than for 1860. There are a few records which refer to the early 'eighties, and form a guide to the prices of 1880.

Actual data being so scarce, it was decided to obtain the required prices, as far as possible, by the theoretical method described above. As there were several records for the years 1886 and 1887, the prices for the earlier of those years were obtained in a similar way as well as those for 1880, and the correspondence between the actual and theoretical values seemed sufficient justification for using the latter for the year 1880.

RETAIL PRICES IN 1886 AND 1880.

Commodity.	London, 1886. Cabinet Maker.	London, 1886. H. of C. 321.	Manchest'r 1887. Chadwicke.	Sauerbeck Method.	
				1886.	1880.
	s. d.	s. d.	s. d.	s. d.	s. d.
Bread ... 4 lb.	0 5½	0 5	0 4½	—	—
Flour ... 7 ,,	—	0 10½	0 8½	0 8½	1 0
Meat ... 1 ,,	0 7	0 8½	0 7	0 7	0 7
Bacon ... ,,	0 7	0 9	0 6	0 10	0 11½
Potatoes ... 14 ,,	—	—	0 7	0 7	0 11
Rice ... 2 ,,	—	0 3½	0 4	0 4	0 5½
Butter ... 1 ,,	1 2	1 0½	1 0	1 1½	1 3
Cheese ... ,,	0 8	0 8½	—	—	—
Milk ... qt.	—	0 4	0 3	—	—
Tea ... lb.	2 8	2 6	2 0	—	—
Coffee ... ,,	—	1 3	1 4	1 1	1 4½
Sugar ... ,,	0 2	0 2¾	0 2	0 2	0 3½

The first column of the table is taken from the budget of a cabinet maker living in London. In 1889 the Board of Trade, under Sir Robert Giffen, carried out an investigation into the standard of living in the towns of Great Britain. The results of the enquiry are published in Cd. 5861, and among other data, is to be found the budget referred to above. The next column explains itself, but it should be pointed out that the price of flour, which is higher than the other prices given, includes 1½d. for the bag and is returnable when the bag is returned. The Manchester prices are those used by Chadwicke in bringing his artisan's budget up to date.

For the commodities, bread, cheese, milk, and tea, this method breaks down. Evidence shows that the price of bread and of milk did not vary much between 1880 and 1886, and hence one will not be far out in adopting the prices of these commodities given in H. of C. 321, for 1886, viz., 5d. for bread and 4d. for milk. The nearest approach to retail prices for cheese and tea in 1880, is the record of import and export prices given in the Statistical Abstract. The average export price of cheese in 1886 was 79·18s. per cwt., or about 8½d. per lb., which is the price given in H. of C. 321. The corresponding price for 1880 is 9d. per lb. and this has been adopted as the retail price for that year. The average import price of cheese for the two years was, in each case, about half the average

export price. Allowing for additions to this price in 1880 for transport, cost of retailing, etc., the price adopted does not appear to be any too low.

Turning to tea, one finds that the average import price in 1880 and 1886 was 13·47d. and 11·77d. per lb. respectively. The customs duty was 4d. per lb., so that in 1886 the London cabinet maker was paying about double the average import price plus duty. Assuming that this is partly due to retailer's, etc., profit (the cost of transport forming but a minute fraction of the price per lb.), and partly to the difference between the average of all kinds and the kind bought, the retail price in 1880 might be safely taken as 2s. 10d. per lb.

For recent years, the records of prices are more numerous, and the Board of Trade index number for various commodities helps us in determining prices in any special year. Official records of prices are found in the Cost of Living Reports of 1904 and 1912. The former prices were based upon budgets of working-class households, and have been adjusted for July, 1914, by the 1918 Cost of Living Committee (Cd. 8980). In the 1912 Report (Cd. 6955) a list of the predominant prices paid in that year by the working class in eighty-eight towns is given. In the following table the highest and lowest prices of 1912, and the 1914 prices, are shown for various commodities.

RETAIL PRICES IN 1912 AND 1914.

Commodity.	1912. Highest Price Paid.	1912. Lowest Price Paid.	1914.
	s. d.	s. d.	s. d.
Bread ... 4 lb.	0 6	0 5½	0 6
Meat ... 1 ,,	0 10	0 4½	0 8½
Bacon ... ,,	0 11	0 10	0 11½
Milk... ... qt.	0 4	0 3½	0 3½
Cheese ... lb.	0 9	0 8	0 9
Butter ... ,,	1 4	1 1	1 2½
Potatoes ... 7 ,,	0 4½	0 3½	0 5
Tea ... ... 1 ,,	1 6	1 4	1 9½
Sugar ... ,,	0 2½	0 2	0 2¼

In the 1918 Report, bread and flour are given together, and the figure given in the last column, therefore, is a combined price. It will be noticed that the prices for meat in 1912 are widely different; this is explained by the fact that the lower applies to frozen mutton, and the higher to British beef. The most general price for meat was 8d. or 8½d. per lb. The price of lump sugar and white granulated was 2¼d. per lb. and these two kinds would probably have been most widely bought. In the case of butter, fresh British was the dearest, and salt Irish was the cheapest, but most kinds could be purchased for 1s. 3d.

CONSUMPTION

In compiling the estimated weekly budgets for the different types of families in the United Kingdom, attention has been paid to two factors, viz., the total consumption of the population at the different dates, and class custom as far as this could be ascertained. The table of total consumption explains itself. As far as the imported commodities are concerned, the quantities given have been taken from the Statistical Abstract (with the exception of wheat). The figures for home production, however, need some explanation.

In 1892, Sir John Lawes and Sir Henry Gilbert made a very careful estimate of the consumption of wheat in the United Kingdom from 1860-1892. The import figure in the Statistical Abstract gives wheat and wheat flour together, but in their estimate of the total consumption, Lawes and Gilbert gave the import figures in terms of wheat grain. The wheat figures for 1860 and 1880, therefore, are those given by these writers in their paper in the *Journal of the Royal Agricultural Society*, 1892, assuming that one-third of the harvest of any year is consumed in that year, and the rest used in the following year.

Previous to the 'eighties, no meat other than preserved was imported, so that the main supply was home produced. J. A. Clarke, writing in 1878,[1] estimated the supply of meat from imported animals as 93 thousand tons. Allowing 50 thousand tons from the same source in 1860, we get 150 thousand tons as the total import figure. The only estimates for home produced meat in 1860 that the writer has been able to find are: (1) that given in Mulhall's *Fifty Years of National Progress*, where 1,050 thousand tons is given, and (2) the figure given by Sauerbeck in 1886,[2] viz., 1,100 thousand tons. Such evidence as has been collected seems to indicate that meat was not eaten very much by the mass of the people, hence the lower estimate has been adopted. The meat figures for 1880 are those given by J. A. Clarke in the article referred to above.

Data concerning the consumption of dairy produce is practically nil for the earlier years. In 1862, Dr. Smith investigated the consumption of the low-fed population in forty English counties. A report of his work is given in the Report of the Medical Officer of Health to the Privy Council, 1863. From the information collected, Dr. Smith estimated the consumption of fresh milk at 328 million gallons per year. Assuming there were $3\frac{1}{8}$ million cows in the United Kingdom in 1860, and that they yielded 300 gallons of milk per cow per year (a little less than that estimated by Morton in his paper mentioned below), the total supply would have been 1,000 million gallons. Subtracting one-tenth for consumption by calves, and the 328 million gallons estimated human consumption, we have 572 million gallons for butter and cheese. Sauerbeck in 1886[3] estimated the home production of butter as 80,000 tons in 1860.

[1] *Journal of the Royal Agricultural Society*, 1878.
[2] *Journal of the Royal Statistical Society.* [3] *Ibid.*

Morton in 1878[1] estimated that 21 pints of milk made 1 lb. butter, and that 1 gallon of milk made 1 lb. cheese. Sir Henry Rew in "The Production and Consumption of Milk," in the *Journal of the Royal Agricultural Society*, 1892, suggests that this estimate was too high for the time. If we assume 20 pints of milk to 1 lb. of butter, the 80,000 tons estimated by Sauerbeck would leave 124 million gallons for cheese, i.e., the home production of cheese was about 50,000 tons in 1860. The figures for milk, butter and cheese in 1880 are those given in *The Dairy of the Farm*, in Morton's Series as the estimated production in 1884. In the same year, Mr. Spencer and Dr. Blyth read a paper before the Society of Medical Officers of Health on "The London Milk Supply." The estimate was based upon information received from railway depôts, farms, and other sources, relating to "a day in summer" and "a day in winter." The writers estimated the daily supply of milk at 110,000 gallons, or one-fifth pint per head per day, but Mr. Spencer said this was undoubtedly lower than in the provinces. Thus Morton's estimate of 2 pints per head per week seems approximately correct for the United Kingdom as a whole.

For potatoes there are no data available upon which one can base a reasoned estimate of the home production at the beginning of the period with which we are concerned. Assuming that the acreage in the United Kingdom under potatoes in 1860 was approximately the same as in 1866, viz., 1·5 million acres ; and that the average produce was 4 tons per acre, we arrive at a total production of 6 million tons. Allowing one-eighth for seed, we have 5·25 million tons for consumption by the population and the animals. In 1886, Sauerbeck estimated the production of potatoes in 1860 as 5·5 million tons. The figure of 4·5 million tons has been adopted as the probable human consumption of home produced potatoes.

The acreage under potatoes in 1880 was rather less than in 1860, viz., 1·4 million acres, but it is probable the yield per acre was slightly higher than in the earlier year, and hence the same figure for home production has been taken for both years.

The figures of pre-war consumption are those given by the Royal Society, and are careful estimates of the human consumption.

CONSTRUCTION OF THE BUDGETS

In constructing the budgets, the main object has been to supply the most common articles of food in such quantities as the total available supply, and the wage received, would allow, subject to the custom of the time, as far as this could be ascertained from descriptions of diet, etc. The calorie value of the diet as thus determined has been calculated with the object of seeing how far such a diet supplied the necessary nourishment. Two standards have

[1] *Journal of the Royal Agricultural Society.*

CONSUMPTION OF THE PRINCIPAL ARTICLES OF FOOD IN THE UNITED KINGDOM IN THE YEARS 1860, 1880, AND 1909-13.

Commodities.	Total Consumption.—Thousand tons.									Consumption per Head per Week.—Lbs.		
	1860.			1880.			1909-13.			1860.	1880.	1909-13.
	Impts.	Home Production.	Total.	Impts.	Home Production.	Total.	Impts.	Home Production.	Total.	Pop. 28·7 Mn.	Pop. 34·9 Mn.	Pop. 45·2 Mn.
Wheat (grain)	1,070	3,070	4,140	3,300	2,070	5,370	5,876	824	6,700	6·20	6·60	6·40
Meat and Bacon	150	1,050	1,200	310	1,147	1,457	1,067	1,574	2,641	1·80	1·80	2·50
Milk, fresh... Mn. gals.	—	328	328	—	500	500	—	961	961	pt. 1·75	2·20	3·20
,, condensed	—	—	—	—	—	—	54	—	54	—	—	0·05
Butter	36	80	116	114	89·5	204	263	113	316	0·17	0·25	0·30
Margarine...	—	—	—	—	—	—	58	59	117	—	—	0·10
Cheese	28	50	78	87	45	132	115	60	175	0·12	0·16	0·14
Potatoes	28	4,500	4,528	121	4,500	4,621	—	4,138	4,138	6·80	5·70	4·00
Rice	17·5	—	17·5	218	—	218	303	—	303	0·03	0·30	0·29
Tea	34	—	34	71	—	71	133	—	133	0·05	0·09	0·13
Sugar	439	—	439	980	—	980	1,501	—	1,501	0·66	1·21	1·40
Cocoa	1·4	—	1·4	4·7	—	4·7	35	—	35	0·00	0·01	0·03
Coffee	16	—	16	14	—	14	12·7	—	12·7	0·02	0·02	0·01

been used in judging the efficiency of the diet, viz., 3,000 calories per man per diem, or 81,000 calories per standard family per week, and 3,500 calories per man per diem, or 95,000 calories per standard family per week. The surplus money, entered as "Sundries," would probably be expended on household necessities, on fruit and other items which have not entered into the main budget; or, in earlier years, in school fees for the children.

It has been assumed throughout that the median family consumed about the average quantity per head of those commodities for which no special evidence has been found. The wheat has been converted into bread on the basis of 100 bread=75 flour, and the quantity allowed has been increased as the wage has decreased, except where the money available made an increase in purchase impossible.

The quantity of meat given in the budgets has been reduced much below the average for 1860 and 1880, since evidence shows that the working classes did not consume much meat in those days. It may be remarked that in some cases more bacon is allowed than butcher's meat, although the latter is the cheaper. Dr. Edward Smith pointed out in his report, however, that fat Irish bacon was bought preferably to other kinds of meat, although dearer, because it supplied plenty of fat for the children's bread, and was therefore cheapest in the long run.

It will be noticed that the allowance of sugar is much below the average: the figures for 1860 and 1880, in the Consumption table include sugar used for industrial purposes, and therefore not available for consumption as sugar. It is probable that part of the "Sundries" item would, in many cases, include treacle, or jam, thus increasing the sugar actually consumed.

The figures in brackets in the budgets of the lowest decile families are estimates of the nominal cost of the commodities. Most agricultural labourers had their own plot of ground (rented at a nominal rate from the farmer) on which they grew sufficient vegetables for the family during the best part of the year.

A quite important item in the agricultural labourer's budgets of 1860 and 1880 has been omitted, viz., beer. A fair proportion of the beer consumed by the man, however, was often supplied by the farmer, but the widespread use of this beverage helps to explain the small quantity of tea purchased each week.

SUMMARY

In 1860, one-quarter of the population appear to have been insufficiently nourished, even when the lower standard of 3,000 calories per man per diem is accepted, while about the same proportion managed to attain to the higher standard. During the next twenty years, the general standard of living increased, so that all were above the lower standard, and even the lowest decile and lower quartile were not much below the higher. With regard to the fami-

lies occupying these two last positions, it may be pointed out that the agricultural labourer with 17s. a week was able to feed his family better than the town unskilled labourer on 21s. 4d. This may be explained by the benefit conferred on the former by being able to grow his own vegetables at very little cost. Before the war, the lowest decile family was between the two standards: the lower quartile just attained the higher standard, while the median and upper quartile were well above. It will also be noticed that not only has each family raised its standard of living during the fifty-four years under review, but the actual money surplus has increased in all cases, even after some allowance has been made for increased rents and increased expenditure on clothing.

It is not the object of this paper to give an accurate quantitative measure of the rise in the standard of living. The enquiry indicates, however, that the lowest decile family in 1914 had attained the same standard as that reached by the median family in 1860; and that the lower quartile family immediately before the war was living rather above the standard reached by the median of 1880, and slightly below the standard attained by the upper quartile of 1860.

The following table shows the comparative calorie values of the diets (the higher standard of 95,000 calories per man per diem=100) and the percentage of the income spent upon food:

	Calorie Value 95,000 = 100.			% of Income Spent on Food.		
	1860.	1880.	1914.	1860.	1880.	1914.
Lowest Decile ...	79	97	89	68	66	62
Lower Quartile ...	82	95	100	67	61	65
Median	92	99	113	67	61	64
Upper Quartile ...	102	105	117	64	62	56

It is difficult to compare the lowest decile in the different years, as in the earlier years the budgets refer to an agricultural labourer, and in 1914 to a town labourer. It is noticeable that the lower quartile and the median, in each year, spend about the same percentage of their income on food; or not until what was probably the average standard was attained, did the proportion spent on food decrease. The figures also suggest that although the representative families were better nourished in each of the three years, the more liberal diet cost a less portion of the income. The increase between 1880 and 1914 of the percentage spent on food by the lower quartile and median families may perhaps be explained by the fact that in 1914 such persons ate a fair quantity of meat, while in 1880, very little of this commodity was consumed by them. It appears, therefore, that all sections of the population of the United Kingdom have increased their standard of living during the fifty years before the war (although not to the same extent), and at the same time have to spend less of their income in obtaining the necessary nourishment.

ESTIMATED BUDGET OF THE LOWEST DECILE FAMILY IN 1860, 1880, AND 1914.
"Family"=Man, Wife, and 3 schoolchildren, or 3·87 "Men."

Wage ...	1860—13/–.		1880—17/–.		1914—20/6.		Calorie Value per Unit.
	Qty.	Cost.	Qty.	Cost.	Qty.	Cost.	
		s. d.		s. d.		s. d.	
Bread ...4 lb.	10	5 0	12	5 0	11	5 6	5,000
Meat ... ... lb.	—	—	½	0 3½	2	1 5	1,200
Bacon ... lb.	1	0 8	1	0 11½	½	0 5¾	2,685
Suet, etc. ... lb.	—	—	1	0 6	1	0 7	3,540
Butter ... oz.	2	0 1¼	8	0 6	4	0 3½	3,605
Margarine ... lb.	—	—	—	—	1	0 6	3,525
Cheese ... lb.	½	0 4	¾	0 6¾	¼	0 2¼	2,055
Milk, fresh ... pt.	—	—	—	—	8	1 2	406
Milk, skimmed pt.	8	0 2	12	0 6	—	—	212
Potatoes ... lb.	40	[1 4]	40	[1 6]	21	1 3	310
Vegetables ... lb.	20	[0 6]	10	[0 6]	—	—	200
Rice, etc. ... lb.	½	0 1	1	0 2	1½	0 3	1,630
Tea ... ... oz.	1	0 3	2	0 4¼	4	0 5½	—
Sugar... ... lb.	1	0 5	1½	0 5¼	3	0 6¾	1,860
Coffee... ... oz.	—	—	—	—	—	—	—
Total for food		8 10¼		11 3¼		12 7¾	
Rent		1 6		1 6		3 6	
Fuel, etc. ...		1 0		1 6		1 6	
Clothing ...		0 9		1 0		1 0	
Sundries ...		0 10¾		1 8¾		1 10¼	
Total ...		13 0		17 0		20 6	
Calorie Value	74,900		92,400		85,000		

ESTIMATED BUDGET OF THE LOWER QUARTILE FAMILY IN 1860, 1880 AND 1914.
"Family"=Man, Wife, and 3 schoolchildren, or 3·87 "Men."

Wage ...	1860—15/6.		1880—21/4.		1914—26/10.		Calorie Value per Unit.
	Qty.	Cost.	Qty.	Cost.	Qty.	Cost.	
		s. d.		s. d.		s. d.	
Bread... ...4 lb.	11	5 6	12	5 0	11	5 6	5,000
Meat ... ... lb.	½	0 3¼	1	0 7	5	3 6½	1,200
Bacon ... lb.	1	0 10½	1	0 11½	1½	1 5¼	2,685
Suet, etc. ... lb.	1	0 6	1½	0 9	1	0 7	3,540
Butter ... lb.	½	0 5	¾	0 11¼	1	1 2½	3,605
Margarine ... lb.	—	—	—	—	½	0 3	3,525
Cheese ... lb.	—	—	—	—	½	0 4½	2,055
Milk, fresh ... pt.	4	0 6	8	1 4	8	1 5½	406
Milk, skimmed pt.	—	—	—	—	—	—	212
Potatoes ... lb.	25	1 3	28	1 10	21	1 3	310
Vegetables ... lb.	—	—	—	—	—	—	300
Rice, etc. ... lb.	1	0 2	1½	0 3	2	0 4	1,630
Tea ... ... oz.	1	0 3	4	0 8½	6	0 8	—
Sugar... ... lb.	1½	0 7½	2	0 7	4	0 9	1,860
Coffee... ... oz.	—	—	—	—	—	—	—
Total for food		10 4¼		12 11¼		17 4¼	
Rent		2 6		3 0		4 0	
Fuel, etc. ...		1 0		1 6		1 6	
Clothing ...		0 9		1 6		1 6	
Sundries ...		0 10¾		2 4¾		2 5¾	
Total ...		15 6		21 4		26 10	
Calorie Value	77,400		90,000		95,400		

ESTIMATED BUDGET OF THE MEDIAN FAMILY IN 1860, 1880, AND 1914.
"Family"=Man, Wife, and 3 schoolchildren, or 3·87 "Men."

Wage ...	1860—20/6.		1880—26/6.		1914—35/6.		Calorie Value per Unit.
	Qty.	Cost.	Qty.	Cost.	Qty.	Cost.	
		s. d.		s. d.		s. d.	
Bread... ...4 lb.	10½	5 3	11	4 7	10½	5 3	5,000
Meat ... ... lb.	3	1 7½	4	2 4	10	7 1	1,200
Bacon ... lb.	1	0 10½	1	0 11½	1½	1 5½	2,685
Suet, etc. ... lb.	1½	0 9	1	0 6	1	0 7	3,540
Butter ... lb.	¾	0 7½	1	1 3	1½	1 9¾	3,605
Margarine lb.	—	—	—	—	½	0 3	3,525
Cheese ... lb.	¼	0 2	½	0 4½	¾	0 6¾	2,055
Milk, fresh ... pt.	8	1 0	10	1 8	12	1 9	406
Milk, skimmed pt.	—	—	—	—	—	—	212
Potatoes ... lb.	35	1 9	28	1 10	21	1 3	310
Vegetables ...	—	—	—	—	—	0 3	300
Rice, etc. ... lb.	1	0 2	2	0 4	3	0 6	1,630
Tea ... ... lb.	⅛	0 6	⅜	1 0¾	½	0 10¾	—
Sugar... ... lb.	2½	1 0½	4	1 2	5	0 11¼	1,860
Coffee... ... oz.	—	—	—	—	—	—	—
Total for food		13 9		16 0¾		22 7	
Rent		3 0		3 6		5 0	
Fuel, etc. ...		1 0		1 6		1 6	
Clothing ...		1 6		2 0		2 6	
Sundries ...		1 3		3 5¼		3 11	
Total ...		20 6		26 6		35 6	
Calorie Value	87,700		94,100		106,900		

ESTIMATED BUDGET OF THE UPPER QUARTILE FAMILY IN 1860, 1880, AND 1914.
" Family "=Man, Wife, and 3 schoolchildren, or 3·87 " Men."

Wage ...	1860—27/6.		1880—32/–.		1914—45/3.		Calorie Value per Unit.
	Qty.	Cost.	Qty.	Cost.	Qty.	Cost.	
		s. d.		s. d.		s. d.	
Bread... ...4 lb.	10	5 0	11	4 7	10	5 0	5,000
Meat ... ... lb.	4	2 2	4½	2 7½	10	7 1	1,200
Bacon ... lb.	2	1 9	2	1 10	2	1 11	2,685
Suet, etc. ... lb.	1	0 6	1	0 6	1	0 7	3,540
Butter ... lb.	1½	1 3	1½	1 10½	2	2 5	3,605
Margarine ... lb.	—	—	—	—	¼	0 1½	3,525
Cheese ... lb.	½	0 4	¾	0 6¾	¾	0 6¾	2,055
Milk, fresh ... pt.	12	1 6	13	2 2	14	2 0½	406
Milk, skimmed pt.	—	—	—	—	—	—	212
Potatoes ... lb.	40	2 0	35	2 3½	28	1 8	310
Vegetables ...	—	0 3	—	0 3	—	0 6	300
Rice, etc. ... lb.	2	0 4	3	0 6	4	0 8	1,630
Tea ... ... lb.	¼	1 0	½	1 5	1	1 9½	—
Sugar... ... lb.	3	1 3	4	1 2	5	0 11¼	1,860
Coffee... ... oz.	2	0 2	2	0 2	1	0 1	—
Total for food		17 6		19 11¼		25 4½	
Rent		4 0		4 6		6 6	
Fuel, etc. ...		1 0		1 6		1 6	
Clothing ...		2 0		2 6		3 0	
Sundries ...		3 0		3 6¾		8 10½	
Total ...		27 6		32 0		45 3	
Calorie Value	96,600		99,800		111,300		

Economic Incentive

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I

§ 1. The object of this essay[1] is not to make any original contribution to knowledge, but to bring together as it were into one picture a number of phenomena which meet with individual discussion in the accepted expositions of economic theory, but whose interconnection is not always made sufficiently plain, and whose accumulated importance is perhaps greater than used to be supposed.

It is necessary to begin by restating in their crudest form the so-called fundamental "Laws of Demand and Supply." A rise in the price exacted for any commodity, by diminishing the inducements to consume that commodity, leads to a diminution in the quantity demanded; and a fall in the price exacted, by increasing the inducements to consume that commodity, leads to an increase in the quantity demanded. A rise in the price offered for any commodity, by increasing the inducements to produce that commodity, leads to an increase in the quantity supplied; and a fall in the price offered, by diminishing the inducements to produce that commodity, leads to a diminution in the quantity supplied. These generalizations are sometimes applied broadly, both to finished commodities and to the factors of production; and it is ultimately on their shoulders that the whole case for a regime of economic freedom is made to rest.

The qualifications which need to be made in the first—or demand—limb of this theory are well understood, and have often been discussed;[2] and they will not be considered here. The qualifications which need to be made in the second—or supply—limb are more subtle and complex, and seem to be more damaging to the uniformity of economic law.

§ 2. As applied to particular products, indeed, this Law of Supply, on the whole, works well enough, and for the following reason. A rise in price, whatever its effect on the minds and actions of those who are already supplying the article in question, will undoubtedly tend to induce other persons to transfer resources from other branches of production into this particular branch: and a fall in price will have

[1] Which has been subjected before birth to so much kindly criticism that I can neither acknowledge my debt nor defend my obduracies in detail.

[2] Cf. Marshall on the paradoxical effects of a rise in the price of bread, *Principles*, p. 132; and G. B. Dibblee on the rush to buy on a rising and sell on a falling market, *The Laws of Supply and Demand*, p. 4.

the opposite effect.[1] It is true that this stimulus may take a considerable time to work ; but nevertheless it works. It is only, therefore, when for some reason, or for some period of time, such a transference of resources is impossible that any qualification of the Law of Supply, as applied to particular products, is necessary.

But within these limits such qualification is important ; for it sometimes occurs that an increased reward per unit for some product incites those who are already engaged in its production not to an increase but to a diminution in the number of units supplied. The most fundamental way of describing this phenomenon is to say that in such a case the producer's demand, in terms of his own product, for commodities in general has an elasticity less than one ; so that a fall in the exchange value of commodities in general against that particular product leads to a smaller total of that product being put upon the market.[2]

This consideration is of some importance in the theory of international trade and of industrial fluctuation.[3] An extreme illustration will serve to make the point plain. Suppose a country to subsist entirely by exporting some one " key " product—say nitrate—in exchange for general imports. Suppose a great rise in the exchange value of nitrate against other products. Then, if the country's nitrate demand for imports in general is inelastic, equilibrium will only be reached at a lower level of nitrate production than prevailed before. But under the complex conditions of modern capitalistic production and international trading relations, the attainment of this lower level will involve dislocation and unemployment ; in other words, until it is reached there will be a " condition of overproduction " in the country in question.

This reasoning throws some light on a paradoxical feature of the recent trade depression. That depression has been associated in this country with a considerable relative cheapening of the prices of imported food and raw materials as compared with the prices of manufactured exports.[4] It might seem at first sight that this

[1] There is, of course, no real infraction of the law in those instances in which, owing to the economies of large-scale production, an increased volume of production is associated not with a higher but with a lower price per unit. For in such instances the lowering of price is not a cause but a consequence of the increase in the scale of production.

[2] This can be expressed in a diagram by altering the usual procedure, and measuring units of product along the ordinate, and units of money—that is, of general income—along the abscissa. A curve can then be drawn showing the conditions of the producer's demand, in terms of product, for income in general. If the relevant portion of this curve falls steeply, a fall in the product value of income (that is, a rise in the reward per unit offered for the product) will lead to a smaller total of product being offered for exchange.

[3] Cf. Pigou, *Economics of Welfare*, pp. 818-19 ; and my *Study of Industrial Fluctuation*, pp. 131, 203-5.

[4] The average value of our imports was 22½ per cent. lower in the first quarter of 1921 than in the first quarter of 1920, and the average value of our exports (excluding re-exports) 2½ per cent. higher.—*Board of Trade Journal*, April 21st, 1921, p. 435.

alteration of the ratio of interchange should be unequivocally beneficial to a manufacturing country. But if this alteration is so great that the demand of the manufacturing population for the products of its agricultural customers becomes inelastic, the principle now under discussion comes into play; and the consequent readjustment exhibits the familiar features of an industrial depression.

§ 3. When we turn from the study of finished products to a study of the factors of production, the Law of Supply still serves us faithfully up to a point. A rise in the price offered for any factor of production *in some particular use* will induce an increase in the quantity of the factor supplied *for that use*; and a fall in the price offered will have the opposite effect. It is, indeed, as already stated, by altering the distribution of the factors of production between different occupations that a change in the price of some particular product ultimately induces a change in the same direction in the quantity of that product supplied.

It is when we come to consider the supply of each of the factors of production *as a whole* that the inadequacy of the Law of Supply, as stated in § 1, reveals itself. The most important illustration of this inadequacy is afforded by the "free gifts of nature," the supply of which lies outside human control, and is therefore not affected by changes in either direction in the reward offered for their use. But apart from this phenomenon, which needs no further discussion here, there are others which, though no doubt familiar, seem to call for a certain re-emphasis and re-grouping. The rest of this essay, therefore, will be devoted to a discussion of certain points affecting the supply of the several factors of production (other than the free gifts of nature), each being taken as a whole. An attempt will be made to distinguish three separate respects in which the crude Law of Supply, as enunciated in § 1, is either inaccurate or inadequate as an expression of the true relation between the reward of the factors of production and their supply.

II

§ 4. The first phenomenon to be discussed is parallel to that already noted, in connection with finished products, in § 2. Some of those who supply some factor of production may have a demand for income whose elasticity is less than one; so that a fall in the price of their service will afford an inducement to increase, and a rise an inducement to diminish, the quantity which they supply. And since we are dealing now with the supply of that factor as a whole, there is here no question of these effects being offset by a transference of the factor to or from other occupations.

As regards capital, this principle is embodied in the famous paradox that there are some people who, desiring to secure for themselves a certain fixed income in the future, will save less if the rate of interest rises, and more if it falls. Their demand in terms of

"waiting"—their "waiting-demand"—for income is inelastic. Marshall considers that these persons are relatively unimportant numerically:[1] Cassel appears to regard them much more seriously and infers that owing to their influence "in a broad sense it might be said that capital is just as willingly supplied at 3 per cent. as at 6 per cent."[2]—a somewhat momentous conclusion.

A similar paradoxical effect is sometimes produced by a change in the rate of reward of business enterprise. This consideration is indeed one of the main arguments for the establishment of a legal minimum wage in ill-organized trades. The lowering of profits necessitated by the payment of an increased wage sometimes, it is alleged, leads to the display of greater enterprise and efficiency on the part of the employer, and so to a general improvement in the organization and management of the whole trade.[3]

The imposition or increase of a tax on the rewards of enterprise and savings is broadly similar to a direct reduction in the rate of reward, and exercises accordingly the same double-edged influence. Prof. Pigou, however, is probably right in urging that with respect to most classes of income-tax payers the effect of increased taxation in stimulating effort is more or less transitory, and the effect in discouraging it more dominant and persistent.[4]

§ 5. In order to elucidate the application of the principle to labour, it will be convenient to attempt a preliminary analysis, which will be useful also in other connections, of that very complex and elusive conception, "the supply of labour." There is, unfortunately, no common unit of work—no composite "erg" of physical, mental and moral horse-power—in terms of which we can evaluate directly the effective annual supply of labour in any country; but the volume of that supply clearly depends on three factors—the number of workers in the country, the average length of time for which they work, and what we may call as a first approximation the "efficiency" of the labour provided.

The number of workers depends partly on the natural growth of population, partly on the defect or excess of immigration above emigration: the natural growth of population depends on the birth-rate and the death-rate: the birth-rate depends (mainly) on the

[1] *Principles*, p. 235.

[2] *Nature and Necessity of Interest* (1903), pp. 147, 155.

[3] "The establishment of minimum rates has been followed, at least in the tailoring industry, by a general increase of efficiency both among workers and among manufacturers."—Tawney, *Minimum Rates in the Tailoring Industries*, p. 160.

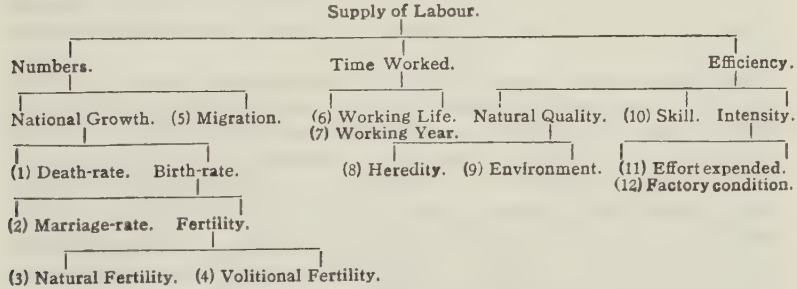
[4] *Economics of Welfare*, Part IV, ch. ii *et seq.* The method of analysis there adopted is not quite convenient from the present point of view. Prof. Pigou distinguishes first between the "expectation" and the "fact" of taxation; and, again, under the latter heading between the effect in stimulating work and the effects on the sources of efficiency and saving. For our present purpose the *main* distinction is between the effects of the tax, whether immediate or delayed, on the *incentive* to work and wait, and its effects on the *sources* of effective work and waiting. The latter are discussed later in § 10.

marriage-rate and the fertility of married persons ; and the fertility of married persons depends partly upon natural forces and partly upon deliberate choice.

The time worked depends partly on the proportion which the working-life bears to the whole life, and partly on the number of hours worked per year during the working-life.

The " efficiency " of the work provided depends on certain ultimate factors, each of which, taken separately, if not practically capable of quantitative measurement, is at least theoretically amenable to quantitative treatment. These factors can be grouped as, first, the natural quality of the worker ; secondly, the degree of special skill which he has acquired ; and, thirdly, the intensity with which he works. The first of these again depends partly on heredity, partly on environment, including pre-natal environment, education, diet and domestic conditions ;[1] while the third depends partly on the degree of effort expended by the worker and partly on what we may call his " factory condition "—that is, the extent to which his immediate physical and nervous state permits his effort to be effective.

It is not suggested that this is the only possible classification of the factors affecting the supply of labour, nor is it an exhaustive one ; but it is convenient enough for our purpose. The whole result may be set out in tabular form as follows :



§ 6. Among these prime elements of the supply of labour, we are concerned at the moment with those numbered (6), (7) and (11). On all these the reaction of the offer of an altered reward per unit seems in certain circumstances to be of the paradoxical kind at present under discussion.

(6) To elucidate this case we must take the family and not the individual as the unit upon which the incentive of an increased rate of wages operates. It then becomes clear that a rise in the rate of wages may very well make a man less willing either to permit his wife to add to the family earnings, or to send his children to work at an early age ; and may thus shorten the effective working-life

[1] Also on the average age of the working population, itself dependent on the same kind of factors as its total number.

of the representative working-man and working-woman, and reduce *pro tanto* the supply of labour.

(7) The operation of incentive on this factor—the length of the working year—has been obscured by two circumstances. First, since the Industrial Revolution the number of hours worked per day has been, in most trades, a matter outside the individual workman's control. In factory industry one must work as long as the machinery works, or not at all.[1] And the same applies, though not so rigidly, to the number of days worked per year.

Secondly, the institution of voluntary overtime, while it introduces some elasticity into the length of the working-day, yet operates in a peculiar fashion. The position of the worker who is offered " time-and-a-half " rates for overtime differs in two closely-related respects from the position of the saver who is confronted with a 50 per cent. rise in the rate of interest. First and most important, the offer of an increased rate is not unconditional ; but is strictly contingent on the performance (say) of nine hours' work instead of eight ; whereas a rise in the rate of interest is not accompanied by any stipulation that the saver shall save more than he did before. The true nature, therefore, of the elasticity of the worker's " hours-of-labour demand " for income does not reveal itself. All we know is that we would rather work nine hours a day at an average rate (say) of 1s. 7d. an hour than eight hours at an hourly rate of 1s. 6d. ; we do not know whether the unconditional offer of an hourly rate of 1s. 7d. would induce him to work more or less hours than he would work for a rate of 1s. 6d.

Secondly, as the above numerical example makes plain, the device of overtime enables discriminatory payment to be made for different units of effort. In order to overcome the worker's reluctance to work a ninth hour, it is not necessary to increase proportionately the payment for the earlier hours. The worker is thus prevented from deriving that full " worker's surplus " on his earlier hours' efforts which figures in Robinson Crusoe economics, and which finds its counterpart in the " saver's surplus " derived by those who are paid for *all* their units of waiting at the rate necessary to elicit the unit of waiting which they are only just willing to provide. Thus, in the event of a rising demand for labour, the device of overtime neither allows the true nature of the worker's hours-of-labour demand for income to manifest itself fully, nor permits that elasticity to be so severely tested as is the elasticity of the saver's waiting-demand for income in the event of a corresponding rise in the demand for capital.

§ 7. In those trades, however, in which the hours of work are to

[1] " At the time they worked those long hours, would it have been in their power to work a shorter number of hours, taking the 3s. ? "

" They must either go on at the long hours or else be turned off."

—*Report of Committee on Factory Children's Labour*, 1831-2, Q. 5118 : quoted Bland, Brown and Tawney, *English Economic History, Select Documents*, p. 513. Cf. Pigou, *Economics of Welfare*, p. 442, n. 1.

an unusual degree within the individual's control, it has long been apparent that the effect of an increased hourly wage may be a diminution in the number of hours worked. This has been particularly obvious in coal-mining and dock-labour, but in times of trade boom it has been observed in other trades as well.[1] In recent years, and especially in the post-armistice period, the increased *collective* control acquired by factory-workers in general over their hours of work has led to similar results on an unprecedented scale. And the still more recent decline in the demand for labour—coupled, perhaps, with the realization that the increase in that demand had never really been as great as ministerial oratory and currency manipulation combined to make it appear—seems likely to lead to the contrary result, and to induce an acquiescence in longer hours of labour.[2]

If the prospect of a rise in the hourly reward of labour is to increase the number of hours worked, it will only be through the belief that the prospect (take the offer of overtime rates) is not unconditional, but dependent on the extra hours' work being forthcoming. At the best, that is to say, the worker's choice may be between the sirens of Leisure and Plenty—between long hours at a high hourly rate and short hours at a low one. In this event it is not certain which he will choose, or ought to choose. But the point is that even if he chooses the former, it will only be through the exercise of considerable collective imagination and discipline. The bare and unconditional incentive of an increased hourly reward cannot be relied upon to elicit a willingness to work longer hours.

It is doubtful, indeed, whether even in the palmy days of the " economic man " the doctrine of the efficacy of the dangled carrot was held to apply without qualification to the labourer. Now and again the cat is allowed to escape from the bag, and we get glimpses of the alternative doctrine of the brandished stick. An economist reminds his readers that " Poverty is a most necessary and indispensable ingredient in society, without which nations and communities could not exist in a state of civilization "[3] ; and politicians argue that a rise in the cost of living might induce the labourer to work sixteen hours a day instead of ten.[4] The escaped cat has never been quite successfully recaptured, and has indeed, it is to be feared, become a skeleton in the cupboard of social progress.

§ 8. (11) We must now consider the reaction of the incentive of increased reward on the hourly rate of expenditure of effort ; and in

[1] See the figures given by the late Lord Rhondda for the coal-trade, *Statistical Journal*, 1903, p. 483 : quoted with some similar opinions in my *Study of Industrial Fluctuation*, pp. 207-9.

[2] Mr. McKenna (address to Institute of Chartered Accountants, June 15th, 1921) asserts that the German workman is now " labouring for long hours with great efficiency and with apparent contentment, or at any rate with acquiescence " ; and ascribes this phenomenon to the stimulus of the raised real reward of labour as compared with war-time conditions. But it seems at least as reasonable to attribute it to the shattering of post-war illusions.

[3] Patrick Colquhoun, *Treatise on Indigence* (quoted in Beer, *History of British Socialism*, Vol. I, p. 145). [4] See Bland, etc., *op. cit.*, p. 513.

so doing we may, for the present, regard the latter as measured with sufficient accuracy by the rate of output. Many of the considerations raised in the preceding section are relevant also to this; but the matter is further complicated by the diversity of the methods of remuneration in vogue.

Under time work there is no precise correspondence between the hourly wage and the rate of expenditure of effort. If the hours of work are fixed, therefore, there is no particular reason why a rise in the rate of wages should furnish any inducement either to increase or diminish the rate of expenditure of effort. If, however, the offer of an increased hourly rate either induces the workman to work longer hours, or is actually (under a system of overtime) conditional upon his doing so, it will probably decrease the number of units of effort expended per hour, and perhaps even the number expended per day.[1]

Under piece work a rise in piece rates which enables the worker to attain a given hourly wage with a smaller expenditure of effort may clearly lead to a diminution in the number of units of effort expended per hour. "It is necessary to remember the serious effect upon time-keeping and output . . . of a scale of wages which places the wage-earner above or beyond the ordinary and customary requirements of his *standard of comfort*."[2]

A rise in hourly wages which takes the form of a substitution for time work of piece work at (say) time-and-a-quarter rates, does not, of course, if the piece rate is "fairly" fixed, constitute an increase in the reward offered per unit of effort. It is simply a renewal of the offer of the *existing* rate of reward per unit of effort, coupled with a guarantee (absent under time work) that that rate will be paid for every unit of effort which the worker chooses to expend. It is only if the piece rate is fixed "unduly" favourably or unfavourably to the worker that it alters the reward offered per unit of effort; and in this case the effect of the change may be of the same paradoxical nature as that of a change in piece rates. It is important to realize that the undoubted stimulus afforded to output by the introduction of piece work does *not* constitute evidence of the applicability of the pure doctrine of "incentive" to the expenditure of effort in manual work.

The small measure of reliance, in fact, placed by many members of the employing class on the pure doctrine of incentive is best illustrated by reference to certain "fancy" methods of payment. Under the "task" or "efficiency" systems of Taylor and Gantt,[3] the offer of a higher rate per unit of effort is strictly conditional on the extra units of effort (as evidenced by extra output) being forthcoming: the case is thus roughly parallel with that of overtime.[4] The extreme of

[1] See the evidence on the effect of long hours in *Final Report of Health of Munitions Workers' Committee*, Cd. 9065, pp. 29-40.
[2] *Ibid.*, p. 51. [3] See Cole, *Payment of Wages*, pp. 59-60.
[4] Cf. Pigou, *Economics of Welfare*, p. 442, n. 1.

paradox is reached in the various "premium bonus" systems,[1] under which again the offer of a change in the reward per unit of effort is conditional on the provision of an increased number of units of effort; but the change offered is actually a decrease and not an increase! This is too much for the workman; and his distrust of these systems is endorsed by impartial authority.[2] The expectation on which they are founded is precisely parallel to the expectation that the workman will leap at the opportunity of earning higher daily, but lower hourly, wages by working an increased number of hours per day. The bastard doctrines of "incentive" to which lip-service is rendered by some employers are indeed strangely different from the pure doctrine of unconditional incentive held to be applicable to those who supply enterprise and saving.

§ 9. Finally, there are certain instances in which a decline in the reward per unit of one factor of production induces an increase in the supply not indeed of that factor but of some other, with perhaps equally beneficial results upon the national income. Thus a fall in the rate of interest on invested capital may induce business men to remain longer in business[3]—that is, to provide more total units of business management and enterprise. A decline in the real income from investments bearing a fixed money rate of interest may induce the middle-class investor to turn his attention to slightly more speculative securities, and his daughter to earn her living as a typist; and may thus increase the supply of risk-bearing and labour.

* * * * * * *

III

§ 10. The second reason for which the crude Law of Supply, as enunciated in § 1, is an inadequate expression of the whole truth is as follows: It can frequently be shown that, in spite of the considerations advanced in §§ 3-9, the reaction of a change in the reward per unit of a factor of production, is in the direction predicted by the Law of Supply—that is, an increase in the rate of reward elicits an increased supply and a decrease elicits a decreased supply. But even when this is established, it is often found that the main part of this reaction does not take place along the route of incentive at all, but along the route of an alteration in the magnitude of the *sources* from which the factor in question is supplied.

Thus, even if we regard those whose waiting-demand for income is elastic and inelastic respectively as of equal importance, it still probably remains true that a rise in the rate of interest will increas the rate of saving. And the reason is that it will swell the source in which a large part of the saving that is done in fact originates—namely, large incomes derived from investments. Very rich people will find it hard to think of anything to do with an increase of income except to save it. Thus the very inelasticity of their demand

[1] Cole, *op. cit.*, pp. 49 *ff.* [2] Pigou, *op. cit.*, p. 439.
[3] Marshall, *Principles*, p. 235.

for *present* income means that a rise in the rate of interest has the same effects as though their demand for *future* income were extremely elastic. The real objection to heavy taxation of incomes is less that it diminishes the *inducements* to save than that it trenches upon the *sources* of saving. And the real peril of a more equal distribution is that society, deprived of the aid of automatic hoarding, might have to rely at last in reality and not in name upon economic incentive for the accumulation of wealth, and might find it a broken reed.[1]

§ 11. In order to illustrate the application of this principle to labour, reference must be made to the table in § 5. The factors in the supply of labour with which we are now concerned are those numbered (1), (2), (3), (4) and (9).

(1) *Death-Rate.*—An increase in economic well-being is likely to lead to a fall in the death-rate, especially the infantile death-rate. Thus a change in the real reward of labour exerts on this element of the supply of labour an influence in the direction predicted by the Law of Supply. But it would be misleading to speak as though this influence operated through the channel of incentive. Human beings do not, like camels, die out of spite if they are dissatisfied with the conditions of their employment, nor prolong for the sake of an increased wage a life which they would otherwise have terminated in disgust.

(2) *Marriage-Rate.*—It is well known that the English marriage-rate was negatively correlated with wheat prices in the earlier part of the nineteenth century, and was positively correlated with exports, clearing-house returns and so on in the latter part."[2] Here again, therefore, there is a reaction in the " normal " direction ; but here again the conception of incentive is inappropriate. We cannot suppose that in times of trade boom marriageable persons solemnly calculate that in fifteen or twenty years their hypothetical children would be able to earn a higher wage than has hitherto been thought, and can therefore more profitably be brought into the world. There is little evidence for the existence of such a combination of deliberate forethought and fallacious inference. Nor, again, even if we are Erewhonians, can we suppose that such a precarious prospect induces the unborn themselves to pester their potential parents more insistently.[3] Rather we must conclude that temporary economic prosperity generates a feeling of optimism which (for some temperaments) finds its natural outlet in matrimony, and that it removes certain immediate financial obstacles which lie across the desired path.

§ 12. (3) (4) *Fertility.*—Here we reach very difficult regions. Mr. G. Udny Yule's inquiries have convinced him that " the course of prices is closely related to the trend . . . of fertility "[4]—in other words, that not only the marriage-rate but the fertility of married

[1] Cf. Keynes, *Economic Consequences of the Peace*, pp. 16-19.
[2] Pigou, *op. cit.*, p. 60. [3] Samuel Butler, *Erewhon*, ch. xix.
[4] *The Fall of the Birth-Rate*, p. 39.

persons is subject in some way to the influence of the " periodic " fluctuations of general economic activity. He further gives it as his opinion " that the nexus is economic, and that it probably operates via psychology rather than through physiology," without, however, being wholly conscious or " volitional." Whether such a sub-conscious influence can properly be regarded as falling within the domain of " incentive," as ordinarily understood, is doubtful. Until the physiologists and psychologists have further cleared up this obscure matter, Mr. Yule's phrase that " migration, marriage-rate and fertility are only three forms of response to demand for population," [1] is perhaps best regarded as a metaphor—a metaphor quite legitimate in its own context, but not helpful to us in our present endeavour to disentangle incentive from the other determinants of changes in the supply of labour.

Further, even in so far as changes in fertility are clearly due to volitional birth-control, they cannot, any more than changes in the marriage-rate, be easily interpreted in terms of incentive. A change in the real reward of labour operates on fertility not by changing the magnitude of the bribe displayed before the eyes of parents, but by modifying the texture of the whole matrix of social habit in which the determinants of fertility are embedded.

Finally, it is now pretty clear that the reaction of economic prosperity upon fertility is in the long run more likely than not to be paradoxical in direction. If it could really be reduced to terms of incentive, it would have deserved discussion in connection with the subject-matter of §§ 6-8. There is now a mass of evidence that a rise in the standard of comfort of any class is likely under modern conditions to lead to a voluntary limitation of the birth-rate.[2] And Mr. Yule detects in this country, since 1885, a decline in " natural " or " involuntary " fertility which suggests a similar conclusion for that mysterious factor.[3]

If, however, as under the old English Poor Law or some proposed schemes for the endowment of motherhood, the family wage is made directly dependent on the number of children, so that the dangled carrot is certainly and immediately consumable instead of distant and problematical, a strong inducement is afforded to the production of children, which may for the time being at least entirely outweigh these deep-seated and obscure forces. An increase in the earnings of babies does undoubtedly tend to elicit an increase in the output of babies.[4]

[1] *The Fall of the Birth-Rate*, p. 41.

[2] Perhaps a reference to Brentano's celebrated article in *Economic Journal*, September, 1910, may be allowed to suffice. [3] *Op. cit.*, p. 39.

[4] Some possible schemes resemble the " premium bonus system " (§ 8) in that the rate per baby falls as the number of babies increases. A more drastic variant, and one more welcome to disciples of Malthus, would be a scheme under which the total " bonus on output " reached a maximum for an output of (say) four, and afterwards declined, the earnings of all babies after the fourth becoming negative. Such an arrangement, however, might seriously increase the temptations to infanticide.

The problem of population is thus exceedingly complicated, and peculiarly incapable of complete elucidation in terms of the crude Law of Supply.

§ 13. (9) *Environment.*—A complete discussion of this factor would require a volume ; but it is clear, and the most hopeful known economic fact, that a rise in the rate of wages does on the whole lead to an improvement in the quality of the worker, by placing within his reach better education, better diet, better housing, and so forth. All that is needed here is to point out that the consequent increase in efficiency is achieved not so much by strengthening the motives for being efficient as by augmenting the sources of efficiency. People do not, to any great extent, eat better food in order to earn higher wages : rather the receipt of higher wages enables them to eat better food.

* * * * * * *

IV

§ 14. In §§ 10-13 we have been considering changes in supply which, though not produced through the mechanism of incentive, are nevertheless traceable to changes in the reward offered. It remains to add that many of the most important changes in the supply of the various factors of production are brought about by forces which have no connection whatever with the rate of reward. This is, indeed, fully recognized in current expositions of the doctrine of incentive, which commonly guard themselves with the disarming "other things being equal," and point out that the effects of a change in reward may in practice be wholly obscured by some independent change in the general conditions of supply. There is, therefore, no need to labour here such a familiar point as this—that an increase in political security or a growth of the habits of thrift may lead to an increase in the supply of saving even though the rate of interest be continually falling.[1] It is worth while, however, to mention one or two illustrations of this principle which are of special interest at the present day, and which may serve to remind us that the relative importance of reward and the other determinants of supply is a matter which, in a changing world, needs continually to be re-examined.

§ 15. With regard to capital, attention must first be called to a distinction which, while firmly embodied in the business convention of the past, does not seem to have its roots in any inherent fact of human nature. The stream of newly saved capital is divided into two branches, the one designed to maintain in their present condition existing plants and stocks of goods, the other designed to add to them. It is only for eliciting these net additions to capital equipment that the bait of interest payment to individual savers is held to be necessary. No self-respecting concern would deign to resort to the

[1] Cf. Marshall, *Principles*, p. 235.

pump of incentive for maintaining the level of the water in the former stream ; adequate allowance for depreciation, except perhaps in times of exceptional stress such as war, is an axiom of good business.

But next it is necessary to note that with the modern development of the joint-stock company, a striking change is coming over business practice in this respect. By means of the various kinds of open and hidden reserve, the accumulation of new capital, as well as the maintenance of that which already exists, is to an increasing extent being performed by directors on behalf, but behind the backs, of their shareholders. The modern professional director may be almost as reluctant as the workman himself to see the proceeds of the year's trading " slopped away " in dividends. No doubt it is true that the shareholders are still propitiated at intervals by the transformation of reserves into interest-bearing securities. But the possibilities of vicarious saving by trustees are clearly much greater than previous generations could have supposed.[1] The stimulus afforded by the Excess Profits Duty to the habit of secretly improving capital equipment out of revenue was from this point of view not wholly an evil, however regrettable the motive of evading taxation which prompted the action.

Again, the future of the supply of first-class business management in this country depends perhaps less on the future level of business salaries and profits than on the extent to which we choose to divert systematically into business channels our notable supplies of the temperament which finds its meat and drink in the taking of momentous decisions, and for which parts of our public service have long been renowned.[2]

§ 16. There are three important elements in the supply of labour —those numbered (8), (10) and (12) in the table—in which improvement is being increasingly sought by more direct methods than the manipulation of rewards.

(8) *Heredity*.—An enlargement of the carrot will neither induce nor enable the ass to re-hang his vocal chords or to shorten his ears. Social reformers, and even economists, are sometimes a little reluctant to admit the implications of the biological doctrine of the non-transmissibility of acquired characters,[3] and are rightly

[1] " Such an outlook is accentuated among the chiefs of great corporate undertakings. Here we already encounter an official idealism identical with that which prevails in the State service. The executive instruments labour for the benefit of times when, in all human probability, they will have ceased to be associated with the enterprise. Almost without exception they do their utmost to reserve for the undertaking the larger moiety of its profits, and to distribute no more than the lesser moiety in the form of dividends, although to the detriment of their individual incomes. . . . The undertaking itself, now grown into an objective personality, maintains itself, creates its own means just as much as it creates its own tasks."—Ratheman, *In Days to Come*, Eng. Tran., pp. 122-3. The whole of this remarkable passage deserves careful attention.

[2] See the masterly evidence of Lord Haldane on this point before the Coal Commission of 1919, QQ. [3] Marshall, *Industry and Trade*, p. 163 n.

concerned to point out its limitations.[1] But there is some danger in chanting incantations over a sore that calls for the knife, and carefully safeguarded " direct action," even if only of a negative kind,[2] offers a better prospect of improving this element in the supply of labour than any increase in economic prosperity.

(10) *Skill.*—This factor obeys the normal law of incentive more consistently perhaps than any other of the prime elements of the supply of labour except migration. Yet even here the relative importance of more direct means of attaining the same ends seems to be increasing. War experience demonstrated the alarming ease with which apparent half-wits could be turned into skilled manipulators of the most terrific instruments of death ; and Scientific Management inculcates the substitution of systematically "organized common sense " for expensively acquired rule of thumb as a means for improving the dexterity of the workman. With the social disadvantages of this revolution we are not here concerned. The point is that the device of consciously analysing and imparting skill is to some extent supplanting the device of bribing people to undergo expensive processes of initiation into vested mysteries.

(12) " *Factory Condition.*"—Upon this vast subject a sentence or two must suffice. It is becoming increasingly plain that the actual " factory condition " of the worker—the extent to which a given degree of physical strength and skill and effort translates itself into terms of effective output—depends far more on other factors than on the rate of wages. Some of these factors are physical—a matter of the technique of lighting and rest pauses and so forth ; others are psychological—a matter of the foreman's temper,[3] of the organized rhythm of the factory,[4] of the general harmony of the worker with the system in which he finds himself a unit. A high wage will not elicit effective work from those who feel themselves outcasts and slaves, nor a low wage preclude it from those who feel themselves an integral part of a community of free men. Thus the improvement of this element of the supply of labour is an infinitely more complex and arduous task than if it depended upon wage alone, but at the same time a task more possible of fulfilment by an impoverished world.

[1] Pigou, *op. cit.*, pp. 95-106.

[2] *Ibid.*, pp. 92-5.

[3] Webb, *The Works Manager To-day*, ch. viii.

[4] " The ordered and systematic routine of a modern factory is a direct stimulus every twenty-four hours to the rhythm of activity and rest : the better the organization . . . the greater is the stimulus to activity."—Quoted from Prof. Loveday in *Final Report of Health of Munitions Workers' Committee*, p. 51.

Cf. the elation of the Bolshevik poet Gastev (*New Europe*, Nov., 1919, p. 113):

" Some time ago we toiled in wretched workshops and began to work in the mornings at various times.
And now the sirens sound at eight o'clock for a whole million.
A whole million take up the hammer in one and the same instant."

V

§ 17. One word on the bearing of all these considerations on the main stream of economic theory. It must be emphasized once more that the argument only applies to the several factors of production each taken as a whole. It is possible, therefore, to urge that all our difficulties arise from a foolish attempt to insist upon attaching some ultimate meaning to the phenomena of supply. It is true enough that an increase in the reward of labour or capital, or indeed of land, *in any one use*, will evoke an increased supply of labour, capital or land *in that use*. If, therefore, we are prepared to embrace Austrian theory, and to say that the supply-price of a factor of production is simply an expression for its demand-price in alternative uses, our difficulties become of no account.[1]

But those who claim intellectual descent from Ricardo and Marshall will not easily be reconciled to this course. To abandon the conception of absolute real cost, however great the complications into which it leads us, would be a retrograde step in the development of economy theory. To that conception we must resolutely adhere, even though we are unable for the present to measure in any common unit the diverse " efforts and sacrifices " which go to make up the great burden of the world's travail, or to express the forces which determine their ever-changing volume in terms of any simple and all-embracing law.

§ 18. The conclusions reached in this article are too nebulous and varied to be summarized in any precise and striking form. But the general reflections which they suggest may be put in the shape of the following propositions, in which the abstractions " rich " and " poor " are used vaguely for the sake of convenience. First, the love of comfort and of power will probably lead the rich to stand, without giving up in disgust the job of being rich, a good deal more pressure than some would have us believe—at any rate if the pressure be world-wide ; and in any case it would be desirable, if ways could be found, to apply to the rich more systematically those devices of discriminatory payments, and of making an increased rate of reward conditional on the delivery of the goods, which have been applied with some success to the poor. Secondly, while we cannot afford to dispense with the manipulation of incentives, an excessive preoccupation with incentive is a heritage of economic science from the past which sometimes tends to darken counsel, and to encourage in some ways an undue optimism, in others an undue pessimism, about the prospects of improving the state of the world.

[1] " But what about the ' supply-curve ' that usually figures as a determinant of price, co-ordinate with the demand-curve ? I say it boldly and baldly : There is no such thing."—Wicksteed, " Scope and Method of Political Economy," *Economic Journal*, 1914, p. 13.

Commodity Maps

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A good map is a triumph of synthesis. Consider a little its origin. Look beyond the familiar lines, colours and conventions of the atlas. Let scene after scene of a country as you know it pass before your eyes, and, for a moment only, so far abrogate your æsthetic sense as to people each with a few scattered groups—intent little mortals with rod, chain and theodolite, busy for hours on some small corner of your single transient view. What myriads of observations, checkings and corrections, what heaps of detailed survey sheets, have been condensed into the well-known features of an atlas map !

The thought helps us to realize how great must be the elimination of detail which results in such condensation. On the other hand, the completed map is an organic whole. Unrelated, the data on which it is based are so many dead facts. But a good map should be a living thing, full of suggestion as well as of information.

Now we are concerned in this article with commodity maps. But they, in common with all other maps, present these two characteristics : the loss of perfect representation consequent upon any system of reduction, and the gain of some vital quality quite foreign to the detailed statistics upon which they are founded.

The ideal map is simply a model of a portion of the earth's surface. It should show everything—relief, agriculture, communications, etc. Practical considerations of manufacture and storage necessitate the contoured map instead of the raised model. Similarly, difficulties of map technique make it advisable to use several different maps for relief, climate, soils, commodities, etc., instead of trying to place all the required information upon one map.

It must be definitely stated, however, that maps showing commodities can only be properly appreciated in connection with physical maps of the same area, or by people having the information available in such maps. The extent to which a commodity map facilitates such correlation is a measure of its usefulness.

It is the first function of a commodity map to provide information. At sight, and without the manipulation of statistics and the consultation of gazetteers, one should be enabled by it to know where and in what quantity a certain commodity is produced. It cannot replace the exact figures of the statistician for certain specific purposes, but it may be sufficiently quantitative in character to indicate at a glance the relative importance of different areas in respect of a certain commodity. Difficulties of map technique—

we will refer to some presently—on the one hand, and difficulties in the collection of statistics on the other, account for the low level of production maps to be found in most atlases of Economic Geography.

One such work, quite representative of the class, is now before the writer. On a map of Brazil a colour smudge purports to represent the production of coffee. Well, so far : Brazil is almost as notorious for its coffee as for its nuts! But does the smudge suggest anything further? This atlas deals with world commodities, and similar smudges in various parts induce one to think that some of these other regions are more productive than Brazil, for some of them obviously cover a greater area. This is unfortunate, for actually the Brazilian production is much greater than any other.

A rough calculation with regard to our Brazilian coffee marking shows it to represent some 80,000 square miles, or considerably more than the area usually under wheat in the United States! Moreover, since it covers map areas representing the greatest diversity of relief, it suggests that coffee has a much greater climatic range than is actually the case. As an index to coffee production the map is inadequate, to say the least.

But there are commodities more important than coffee—though certainly this map seems to suggest the contrary—and we will turn to a coal production map.

The map compiler's descent here is clear. "Now," he seems to say, "I will allow myself the luxury of accuracy. To tell the truth, I wasn't very happy about that coffee map myself ; but in this case I can consult the records of physical science. Geological maps are available, and published by a Government Department too!" And "spotting" with glee many areas of quite easily traceable "coal measures" in his geological map, he proceeds to transfer these, and these only, to his use, unembarrassed by the wealth of colour and design exhibited by surrounding portions of his original. Having shepherded them from their bizarre environment to his own white sheet, he begins to believe in them. To his vivid but untutored imagination they become almost as solid masses of coal. They are usually printed black in the textbooks. Their map area is full of quantitative suggestion of reserves at least, if not of production.

Now all this is unfortunate, for the geologist—pure seeker after truth—is concerned in his map with the areas of outcrop of certain formations. His classification of these formations is based on relative age, as determined by fossil content and by stratigraphical evidence, and his grouping is such that each formation embraces a great variety of lithological character. What he marks as the coal measures of the Upper Carboniferous may, and probably do, contain some seams of coal. They are, as it were, the symptoms of a particular type of deposition, and he values them in the first instance as a means of correlating the rocks of one exposure with those of

another. Of course, the more detailed his studies[1] the more information of definitely economic character emerges, and it is to the professional geologist that one must turn for information as to the mineral resources of any area; but the "coal-fields" of the elementary economic map are not derived from the detailed studies and sections of the mining geologists, but from elementary geological maps in which the coal measures are marked merely as one of a series of groups of historical geology, and without any reference to the number, depth, and thickness of the coal seams; with no reference, in fact, to what we may term the mining accessibility of the coal.

Often large areas of coal measure outcrop are barren of workable coal. Often again the measures dip under newer rocks, and the coal is worked by shafts sunk through these; that is to say, in areas not marked as coal measures at all on the outcrop map. But it is the coal measure *outcrops* which are traced off, separated from the surroundings of the geological map—surroundings which tend always to explain their structure—presented stark on the pages of every elementary atlas, and there designated coal-*fields*.

If the origin and limitations of such maps are clearly proclaimed, and as clearly understood, they have their uses. Quite often they mark accurately enough for elementary purposes the general location of some of the most important of the world's producing areas. But to the uninformed they are apt to be entirely misleading. Thus the economic atlas gives no indication of coal in the Dutch Campine, or between Doncaster and the Trent. Concealed measures are not marked. They are often of very great importance.

Or the beginner is apt to be obsessed by the mere *area* of coal measure outcrop. On such a basis the Western interior fields of the U.S.A. (Iowa, Kansas, Oklahoma, Texas) might be supposed to have accessible reserves comparable to those of the Appalachian field, or the Michigan field to have possibilities at all comparable to those of Illinois.

For showing actual production, such maps are entirely useless, for to the enormous variations in mining accessibility of various parts of a field is added the difference due to varying degrees of development. Many large fields of immense and accessible reserves have only a tiny production because their development is only just beginning.

One has perhaps said enough to make it clear that our mapping of commodities, whether by crop areas, crop yields, or mineral output, is at present quite inadequate. Most published maps of this nature give little accurate information. Frequently they are misleading.

It is only proper to state here that the map producer is probably aware of the unsatisfactory nature of such maps, and he quite rightly resents criticism of them as quantitative when all he essays to show

[1] His studies must keep pace with the development of the field. Each opening up of a colliery provides him with fresh data—available in no other way—upon which he may base advice as to the next step in development.

is qualitative. What we are concerned to emphasize is that commodity maps indicating with so little exactness where a commodity is produced, and showing not at all the amount produced, are useless and often worse than useless.

Now let us see what are some of the practical difficulties which are preventing the publication of useful commodity maps. Suppose we take the case of the production of wheat in England.

We can easily get the amount produced in any year for the whole country. That may serve for an elementary comparison with the production of other countries, and we may elaborate the figure by finding the production per head of the population. The comparison of the very few and simple figures resulting gains nothing by map representation. So we go a step farther and find that a kindly Board of Agriculture gives us the wheat production per county, and even a cursory glance at such a list of figures indicates that there is a very varied production. But the counties vary greatly in size, so we divide the production of wheat in each by the area of each, and so obtain a kind of wheat density figure. At once it becomes apparent that there are great differences in the degree to which wheat is cultivated in the various counties, and that there is a definite geographical grouping of the counties of high wheat cultivation. This becomes particularly striking if we take a map showing the county boundaries. Then grouping our counties according to their wheat density, and adopting a scale of progressively deepening tints corresponding to these groups, we apply to each county its proper tint and so obtain a simple wheat production map. We notice at once that wheat is a noteworthy crop in our south-eastern counties, and we are most of us well enough informed to realize that climate and soil are big factors in this distribution.

But such a map is not really satisfactory even for a very general study. We know enough about our counties to realize that there is none of them with a perfectly even distribution of wheat crop throughout its area. Nearly all, and particularly those of the south-east, have each many varieties of soil and some varieties of relief and climate. The county division is too large. The next division is the parish. Maps showing the outlines of parishes are published, but the parish production figures are not available. They exist in official records, but they are not published. They have occasionally been used by special permission of the Board of Agriculture, and crop density maps for small areas have been made in connection with many detailed geographical studies. But none are published, and no large area has been so dealt with.

Now a crop density map on the parish basis begins to show clearly the effects of even the minor variations of soil and climate.

An elementary geological map will show the surface of Central and Southern England to consist of a series of parallel belt-like outcrops running in a general line from N.E. to S.W. and comprising Triassic, Jurassic, Cretaceous and Tertiary formations consecutively.

One must make it clear to any minds innocent of all geological reading that this major classification is based on relative age, and that each of the above-mentioned formations includes many and various rock materials. Thus the Cretaceous, over much of its outcrop, may consist of a chalk, a chalk marl, a heavy clay, a friable sandstone, a heavy clay again, etc., and since a sequence is maintained, a number of minor belts of rocks, hard and soft, porous and non-porous, fertile and infertile, appear within the Cretaceous belt, and parallel to its outcrop boundaries. So with the other formations.

Thus a crop map based upon parish figures clearly indicates these belts of arable land, alternating with belts of lesser fertility, and becomes an illuminating commentary upon the geological map. A parish is often so small an area that no essential change of physical conditions will occur within its boundaries, and upon this fact rests the possibility of constructing good crop density maps on a parish basis. But on the other hand, it too frequently happens that the parish though small in area is elongated sufficiently (and often from an historical point of view, purposefully) so that in several miles of length, say, it overlaps a considerable variety of soils. Marsh, meadow, arable and woodland soil strips often occur cutting across each of several parishes, and obviously when this happens the correspondence of physical and crop maps will be to some extent vitiated.

This elementary instance has only been elaborated to show the dependence of all crop density maps on statistics of area and production, and to show, further, that even in the most favourable circumstances—and the publication of statistics for areas less than parishes is hardly conceivable—exact correlation with physical environment is not attained. Let us emphasize once and for all that the chief difficulty in the construction of agricultural commodity maps is the fact that statistics are not usually available for sufficiently small areas.

Now the interrelation of man with his environment has been a very usual theme in educational work of recent years. In particular, an attempt is made to relate agricultural production to climate and soil, manufacture to the locations of natural sources of power and of raw materials, and both to the possibilities of transport.

Not that the physical is regarded as the sole and determinative influence, for rather the tendency is to see in man's history the gradual emancipation of the creature of physical circumstance. Apart altogether from the more disputable questions of moral and ethical progress, our age must stand out for its analysis of those physical factors which have influenced and partially controlled the activities of mankind, and as witnessing the beginnings of a conscious and reasoned, rather than an unconscious and fortuitous, adaptation to environment.

The matter is not so irrelevant as may at first appear. In his presentation of these evolutionary tendencies, the schoolmaster and the university teacher are hampered by want of material. The

map may be the humblest part of the teacher's equipment, but it is a necessary one. The spade does not make a gardener, yet he must use one.

In fact, it is the educational nature of such maps that must be especially urged. From this educational standpoint a chronological sequence of production maps has quite special value. To take an actual and simple example, let us for the moment regard man himself as a commodity. The U.S.A. census shows a decennial sequence of population maps from 1790 onwards. These not merely state the gradual expansion from coast settlement to the Middle West, to the High Plains, and ultimately to the Pacific ; they show it in such a way as to be a constant challenge to the historian. They ask questions, the answers to which rest largely in the physical environments encountered. They define the line of enquiry, and save much actual time.

Or again, a quinquennial series of maps for some great agricultural commodity, wheat or cotton, say, would show not merely the development of new lands, but the changes in distribution consequent upon new types of agriculture ; the invasion of areas at one time considered unsuitable for the particular crop considered, by means of irrigation, dry farming, seed selection and adaptation, or a more scientific use of fertilizers.

One cannot too much emphasize the thought compelling quality of such maps, quite apart from the actual information they present.

A word as to some technical difficulties involved in quantitative map production. Three main methods appear. Each has its special uses and its limitations.

The first is the method of pure reduction and is only partially quantitative. One may take an aeroplane photograph as an example. If such a photograph distinguishes between arable and grass land, or between certain crops (as it does in some lights), then it resolves itself into an excellent detailed commodity map. The writer is not suggesting that aeroplane photographs should be used for this purpose —though their important place in general map making is common knowledge—but is merely giving an illustration of the type of pure reduction maps. Each field is shown in its relative position, occupies its proportional area, and may be marked with its appropriate crop symbol. Such maps are only partially quantitative because of the variation in yield per acre. For small areas, however, this is not very important, and the map is too elaborate for construction over big areas.

For very small areas, however, such a field survey provides a most stimulating school exercise. In our country, of course, its cadre would be the 6 in. ordnance map. For the uninitiated, we must state that this map is contoured and shows field boundaries. It is difficult to conceive of a more useful instrument in the hands of a capable teacher. It adds a new joy to trespassing! With its straight-sided fields the science of arithmetic becomes an outdoor

game. It is an invaluable aid to the initial study of contours and of typical land forms. In addition to all this—and returning to our subject—the actual fields may be traversed map in hand, and each marked with an appropriate crop symbol. The relation between the nature of the soil and the use made of the land can be studied.

If the local schools of adjacent districts were to undertake such work in a systematic way, useful combined maps of very considerable areas could be easily produced and reduced. County education authorities might well father such a scheme, stipulating such uniformity of technique as would make combination possible, limiting their jurisdiction to the mapping of certain major crops, but otherwise entirely avoiding any encroachment upon that liberty of initiative as precious to every good teacher as to every child of nature.

An example of a very simplified field survey appears in Fig. 1. The map was constructed to show the influence of geological structure (and consequent outcrop soils) upon agriculture, in a small selected area. The map is reduced from the 6 in. The fields are grouped only into arable, permanent grass, woodland, and wooded down. It will be seen that in this instance there happens to be a complete correlation between the outcrop and the use made of the land.

Outcrop Belt.	Use of Land.
Upper Greensand. Here a very light sandy poor soil, sometimes covered with gravel patches.	Very little arable. Gorse. Common. Woodland with conifers. Dry grass land.
Gault. A heavy clay. Difficult to drain.	Permanent wet pasture. Some marsh land. Oak copses. No arable.
Upper Greensand. Sandy soil with much limestone admixture. *Lower Chalk.* The most impure of the chalk layers. Contains some sand and clay.	All arable for a very long and very narrow strip of good agricultural land at the base of the downs.
Middle and Upper Chalk. Almost pure chalk, with no drift cover in this part of the downs.	Sheep pasture.

From the point of view of map technique all such maps are reduction maps simply. They represent directly an actual state of affairs without the intervention of calculation based on production and unit area figures.

For very large areas very different methods must be employed. These all involve crop density figures for each administrative

FIG. 1.—SIMPLIFIED FIELD SURVEY BY STUDENTS OF THE GEOGRAPHY DEPARTMENT, LONDON SCHOOL OF ECONOMICS.

division considered, the quantitative grouping of these figures, and the marking in some way of each administrative area on a map to indicate the density group to which it belongs. The method is one which every school child would follow for himself, and needs no further explanation. As we have already pointed out, the significance of such maps is in inverse ratio to the general size of the units for which figures are available.

A form of this production map much in vogue, and one to be guarded against, is that showing by colour grading for each administrative division, the area under a certain crop considered as a percentage of the total cropped area of that division. Such maps may be very useful as showing environments specially favourable to certain crops, or again, as indicating sometimes too great a dependence upon one type of culture ; but obviously they cannot be substituted for production maps pure and simple, otherwise hundreds of square miles of desert might simulate a maximum of productivity on the strength of a single irrigated acre of some one crop! The official mind is peculiarly attached to this type of map. It is frequently the only one available.

A noteworthy variation on the grading (by colour tint, or shading) of the administrative area, is to place on the map within the boundaries of each such area an appropriate number of dots each representing a definite unit of production. This method has some distinct advantages. These partly arise from our psychological deficiencies. If an area is covered with some even tint representing a certain crop density, it requires almost a mental effort to prevent a conception of the crop as covering the whole area—however thinly! A small matter perhaps, and one avoided in a moment's thought, yet the *Unit Dot* system overcomes the difficulty, and, further, it is not difficult to choose the average size of the dot so that it approximately *does* represent (upon the scale of the map) the actual crop area concerned. There is the further advantage that if the map-maker has, say, 100 dots to insert in some one (too large) area which he knows to exhibit very varying physical conditions, he can, if he be sufficiently informed, so place them within this area as to give really a truer picture of the actual state of affairs than that conveyed by an *even* distribution throughout the whole area.

The Unit Dot method is used successfully for very large areas in the agricultural maps of the last U.S.A. Census. An example of a very large area so treated appears in Fig. 2. It is not at all the purpose of this article to go into the physical and historical reasons for the distribution there shown, but the writer has added to the map three simple lines which indicate the nature of some of the chief controlling factors, and has left the correlation to the reader. These lines are :

(i) (See Fig. 2.) Limit of Laurentian Archæan Shield. An area of old crystalline, glacier-stripped country occupying

FIG. 2.—WHEAT DENSITY MAP OF WESTERN CANADA.

I. x x x Limit of Laurentian Shield.
II. — — — Line of 130 days above 60° F.
III. – – – 10 in. Precipitation.
Each dot represents 5,000 acres.

the N.E. quadrant of North America. Naturally forested, rugged, difficult and expensive to clear, and of soils generally inferior to those of the prairie lands.

(ii) Approximate line of average of 130 days above 60° F. for a year.

(iii) Line of 10 in. precipitation.

The western limit is formed by the foothills of the Rocky Mountains.

There remains the case of mineral production. At present almost the only maps available are those based upon the geological outcrop maps, and we have already noted that the usual coal-field map is little guide to reserves and none to production. The case of iron is worse. The normal iron ore maps of the U.S.A. and Sweden would suggest that the Lake Superior and Lapland ores are the *least* important in their respective countries.

For minerals we have a new difficulty in map technique in that we are dealing with a point production rather than an area production. In the case of a crop it is possible to mark the map area which actually represents the area covered by a particular crop. Obviously this cannot be done for mineral production, though if the administrative areas for which figures are available are sufficiently small, one may imagine the production spread over the whole area and adopt the same methods as for crops with significant results. Thus in the U.S.A., official figures for counties exist, and in the eastern coal-fields these counties are small enough to indicate very clearly (when tinted for production density) the *eastern edge* production of the Appalachian field, and the *basin rim* production of the Illinois field.

The writer suggests that a useful method of mapping (say, for a coal-field) is to put the outcropping measures in with a light tint, as also the proved concealed measures, and upon this to indicate quantitatively the areas of actual present production.

With regard to this last, probably the best convention, when it can be followed, is to mark each pit with a dot proportional to its production. This assumes a map showing *by names* the pits actually working, and a list of output figures for each pit. Neither are available in this country. One can get the Government List of Mines, and also a List of Mines which have been closed. Both would be useful documents if accompanied by maps. Some railway companies have pit maps. They are not complete, and they are private documents. A few trade journal maps are available, but these constantly get out of date, and they are not complete.

As for ordnance maps, they cannot be constantly revised, and half the pits shown are no longer in use. Half the pits working are not shown. Those shown are often not named! It is no use looking at the name of the nearest village. The pit is as likely to bear the name of a manager's inamorata, or of a Derby winner! And when you have tracked down the pit there are no production figures forthcoming, save those dealing probably with small areas in scattered, incomplete and semi-private publications.

The writer realized these difficulties in an attempt to map the coal production of the Yorkshire, Derbyshire and Nottinghamshire field. Eventually mines accounting for more than 90 per cent. of the men employed were placed. Figures of actual production were lacking, and so the production dots were made roughly proportional to the number of men employed underground at each pit (which figure is published in the List of Mines). One is quite aware that the two figures, production and men employed underground, are not at all strictly proportional, even on the same coal-field. Variations in the thickness of seams, in everything included in the term mining accessibility, partly account for this, but other and more technical matters are concerned.

However, they were the *only* figures for the whole coal-field which were available. The resulting map appears in Fig. 3. The enclosed western area is the outcrop area shown on all elementary atlases. Little coal is raised in the extreme west of this, where the measures are denuded save for the relatively barren lowest series. Yet it was here, south of Bradford and west of Leeds, or again in the narrow converging valleys west of Sheffield, that the typical industries of West Yorkshire developed rapidly in the early

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Each mine is indicated by a black square the size of which is proportional to the number of men employed. The closed line on the west indicates the area representing this field as shown on most elementary maps, i.e. it represents the *outcrop* of coal-measures. The irregular strip to the east is the outcrop of magnesian limestone, and east of this again is the Trias Plain. These formations all dip to the east.

FIG. 3.—THE YORKSHIRE, DERBYSHIRE, AND NOTTINGHAMSHIRE COAL-FIELD. [See note on facing page.

nineteenth century, for the streams of these hilly regions were of sufficient gradient to be used for power. And with the growing use of coal the outcropping seams of these deeply dissected western valleys were, at first, and before the development of mining engineering, more available than the thicker and richer but deeper seams to the east. To the east of the coal measure outcrop the productive measures dip (more regularly than in most of our coal-fields) under newer rocks, and since 1850 a gradual extension of the coal-mining area to the east has occurred. The largest, deepest, and most productive mines are now working through the Trias as well as the Magnesian Limestone in the east of the field.

The writer estimates that about one-tenth of the pits actually working are situated to the east of the coal-field as marked in the usual atlas, but that these produce more than one-third of the total coal raised in the field. They are large, deep collieries, employing more than 1,000 men each, and working chiefly the Barnsley seam at depths between 2,000 to 3,000 feet.

Finally, we come to the fundamental question of the provision of statistics. These will not be collected by Government with the set purpose of making maps. On the other hand, *all* the statistics collected should be available to the public, and surely, in all countries, the four or five chief crops and the two or three chief minerals should be regularly and adequately mapped.

To deny this is to deny to the ordinary citizen the simplest information with regard to facts of fundamental political significance. To take the case of our own country: in the view of the writer it should be the business of the Board of Agriculture to issue, at regular periods (say, 5 or 10 years), production maps based on parish figures, and of the Department of Mines to issue production maps on a pit output basis. It is probable that this could be done without any addition to the already existing machinery engaged in the collection of statistics. It could probably be done without one single addition to the staff. If these maps were made on a convenient scale—say, by counties on a $\frac{1}{4}$ in. scale, and showing *nothing* but the production—the school circulation alone would probably pay for the publication costs. The writer is not suggesting for one moment that there should be any official attempt on such maps to relate the production to the physical conditions prevailing in various areas. This can be done most effectively and most economically by outside investigators, but these must rely on Government figures or on bare production maps based on such figures.

Industrial and Commercial Libraries of the Future

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Since the publication of the *Report of the Adult Education Committee on Libraries and Museums* (Cd. 9237, 1919, 3d.), interest in the development of industrial and commercial libraries in this country has been considerably aroused. Most people who have thought about the matter at all regard the adequate provision of such libraries as an urgent necessity, but experienced librarians do not generally approve of the system of organization recommended in the Report mentioned. This Report argues that "The existing provision of technical libraries is, however, not fully utilized, nor is it adequate to meet the needs of a great industrial and commercial country. In the case of general libraries the unit of organization and administration is the local authority; in the case of the technical library system it should be the industry." With the first sentence of this quotation librarians entirely agree; as regards the next, most librarians emphatically disagree with it. I would point out at once that, although this committee was specially considering libraries, *there was not one representative of the library profession among its members.* No doubt evidence was obtained from librarians, but that is a vastly different thing compared with the power of argument and vote which membership of a committee affords. This fact in itself accounts for many of the recommendations put forward, and it should be closely borne in mind in connection with any criticism the Report may receive. The proposals of the committee, briefly, were as follows. Public libraries are to provide literature dealing with the predominant industries in their localities, and a central library organization is to be founded in each industry to establish and maintain a library to supplement existing libraries. This central library, says the Report, would need adequate accommodation. The Report seems to be curiously contradictory. It advocates arrangements being made with the local public libraries where an industry is strongly localized, and where industries are widely diffused throughout the country the local public library is again recommended as the source of supply. Where is the need, then, for a central library for each industry if the public library is to be the basis of the library system, both where industries are strongly localized and where they are not localized? The whole idea is bad, uneconomical and calculated to hinder efficient service and co-operation. The greater the number of organizations to be dealt

with the more difficult and troublesome will it be for prospective readers to get their wants supplied. Under the system proposed in the Report, the technical student would *first* approach the public library in his district ; failing satisfaction there he would apply to a branch industrial library, or to the central library for the industry, then to other technical libraries or the central circulating library. The non-technical student would also apply first of all to the local public library, then to the central circulating library. The latter, failing to supply what is required, would draw upon the libraries where the books were available. It is quite obvious that by the time all these operations are performed, the need will, in many instances, have vanished.

Now, these special industrial libraries are to look for their maintenance to the industries concerned, which are also to be expected to support other special libraries to be established in connection with Research Associations, as outlined in the draft memorandum of the Committee of the Privy Council for Scientific and Industrial Research. It is not doubted that technical men are keen to establish Research Associations, of which research libraries would form an essential part, and these associations would be supported ; but it is open to very grave doubt whether the technical men would undertake to support, in addition, industrial libraries as separate organizations.

For some reason the committee is of the opinion that commercial libraries do not require the same development as the technical, and that the same degree of specialization in commerce is not necessary. With this opinion I fundamentally disagree. I would remark here that technical (or rather industrial) libraries have to do with all phases of the manufacture of commodities ; they are specially for the use of the individual in the laboratory and the workshop. Commercial libraries are particularly intended for all those interested in the distribution of materials, both in their raw and manufactured states.

While it is obvious that each kind of library appeals to a quite different section of the community, it is equally clear that many books in each are indispensable to both. Such a work as Clayton's *Margarine*, for instance, deals not only with methods of manufacture, but also with the production and distribution of the raw materials necessary in its manufacture, while the extensive bibliography in the volume is invaluable to the maker and the distributor. Redmayne's *Colliery Working and Management* appeals equally to the colliery proprietor, the merchant, the economist, and the geologist. Therefore, if excessive duplication is to be avoided, centralization of library effort is essential.

It has been pointed out more than once that while libraries in the past have catered pretty fully for geologists, astronomers, historians, philosophers and travellers, little serious effort has been made towards supplying the literary needs of the commercial man. Glas-

gow, Birmingham, Bristol, Manchester and other large towns have, in quite recent times, endeavoured more or less successfully to remedy the deficiency ; but nothing in the way of a universal scheme has yet been attempted, a scheme which would provide an adequate commercial and industrial library and intelligence department in every town, controlled by the municipal authority, and possessing a staff trained in classification, cataloguing and indexing. The latter is perhaps the most important duty in such a library. There are many huge accumulations of books in the kingdom, but few of them have such a system of making the contents of books known and accessible as the seeker after information desires and has a right to demand. For the commercial man in particular, it is essential that he should have easy and ready access to the most up-to-date information on commercial subjects. Current intelligence should be indexed and classified in such a way that its presence in the library would be immediately intimated. It is not only necessary to have a full supply of trade and technical journals in English and foreign languages, but infinitely more so to have the articles in these journals at once brought to the notice of enquirers.

Literature for technical men and for commercial men is, generally speaking, for the one and not for the other ; but overlapping must exist to some extent. The commercial library is intended mainly for the distributor. It should be able to supply detailed information regarding the production and uses of raw materials, the best means of transport and the cost, methods of packing and shipment, the countries where particular commodities are in demand, the agents of distribution, tariffs and customs duties, and many like matters both in home and foreign trade. It should be able to answer fully such questions as : What industries are carried on in this place and where are they located ? What wholesalers will be able to supply me with the products of these industries ? Where can I buy various specified commodities and what will be their approximate cost ? Such a library would, therefore, need to specialize in the literature of local industries and trade. No commercial library is complete without the official publications of various countries dealing in any way with commerce and industry, in particular the consular reports, usually issued annually. I would especially emphasize the need for a full supply of the consular reports and other publications and commerce reports issued by the United States Department of Commerce. There is little doubt that for practical purposes these are much more valuable than those issued by the United Kingdom. They are evidently compiled by men who understand their subject and make personal investigation into matters of moment, while the English ones consisted, at any rate until recently, very largely of material copied from the publications of the countries concerned. This is by no means the same thing where utility is the chief consideration. I am thinking more of the *kind* of information contained in the reports rather than of its accuracy. The United

States Department of Commerce has issued quite the fullest commercial handbook of India to be obtained, and the recently issued commercial handbook of China, from the same department, in two volumes, is very complete and exhaustive. *Co-operation in American Export Trade*, a misleading title rather, contains in its second volume the fullest account yet published in English of the working of the German cartels and of trusts and combinations in all other countries. There are very few copies in this country and it is not easily obtainable, while the valuable trade directories of *Central America* and *South America* are almost impossible to get hold of, as copies are not allowed to be sold to other countries than America. They are of the greatest service to people wishing to trade with South America, and presumably the Americans are not at all anxious to supply other nations with information specially compiled for the benefit of their own commercial men. The annual statistics of the trade and navigation of the different countries of the world are, of course, well known and indispensable, but there are certain publications of some of the smaller countries which do not appear to have received the attention here which they deserve. For instance, the annual reports of the Rumanian Consul at Rotterdam are veritable mines of information on that port. Each year's report comprises a thick quarto volume, full of detailed information, in French, containing frequently valuable maps and plans of docks and terminals, not obtainable in any similar publication. I ought to mention here another United States publication, entitled *Training for Foreign Trade*, which contains a valuable bibliography of official publications of various countries, necessary for the commercial man or student. Obvious works for inclusion in a commercial library need bare mention only. They consist of business encyclopædias and directories, shipping and railway guides, trade year books, reports of chambers of commerce, trade and technical journals, dictionaries of various kinds, besides ordinary treatises on commercial products, marketing, advertising and many other subjects. A series of dictionaries—Plumon's Commercial Dictionaries—now being published in this country by Messrs. Selwyn & Blount, should be noted. The series is planned to contain some thirty or forty volumes, each dealing with a special branch of commerce or transport, usually in three or four languages—English, French, German and Spanish. Probably everyone interested in commerce knows Kelly's Directory of merchants, manufacturers and shippers, but it is worth mentioning, because in it will be found a gazetteer of practically every commercial town in the world, giving particulars of population, products and trade, with many maps and plans and a mass of invaluable information. If you are asked which merchants in Cyprus export locust beans, Kelly's work will tell you. Efforts should be made to keep the library up to date in the commercial law of various countries. This is frequently only possible by obtaining texts of the laws in the language of the issuing country, but it is obvious

that the merchant here should be aware of what the legal position of his business may be in other countries. Like many other things it is so obvious that nobody troubles much, with the inevitable result—nothing doing. Maps, atlases, plans of towns, etc., are all most necessary in the commercial library ; in fact, the collection and exhibition of reliable maps is one of the most important parts of the work. I say *reliable* maps, because it is an unfortunate feature of map production in this country that the economic details are frequently most inaccurate or out of date. The majority of those published may do for the general reader, but not for the specialist. I have met very few maps of Siberia which place Baikal railway station on the right side of Lake Baikal, which is not a tiny pond. Quite recently I saw a map of Korea which, although published this year, and purporting to be up to date, failed to show an important extension of railway which was opened for working in 1919. The number of maps in a collection is nothing like so important a matter as the accuracy of the information contained in them. In any case maps are likely to be much more useful if they are taken out of volumes, mounted on linen and classified geographically rather than alphabetically. The man studying transport routes from Czecho-Slovakia will prefer to have neighbouring countries next in order. Other material necessary in the library will be telegraphic code books, and trade circulars. Some of the latter are highly important to the commercial man, and, in fact, often comprise the only sources of detailed information in a handy form.

It is surprising how little commercial literature of authority has been issued in this country. There is no good work on the shipping industry, and very few on transport matters published in this country which may be considered of value to the practical merchant and trader. He has the greatest difficulty in discovering from any book what are likely to be the costs and conditions imposed for sending a consignment of commodities by rail. The official classification is not easy to obtain, and the " coaching arrangements " even more difficult. In fact, it is almost impossible for anyone to consult the latter anywhere. Probably no country in the world, possessing a literature at all, is so deficient in books of value to the commercial section of the community. Even commercial geographies are sadly lacking. The standard work—*Chisholm*—although the latest issue is 1920, in referring to Coventry, says, " Coventry is noted for its ribbons "—that is all. One has to go to America for competent books on shipping, railway transportation methods and engineering, and in fact most other commercial subjects. There is no book published in this country on " marketing," surely an important section of the merchant's business. Why, there isn't a standard work on the Bank of England written by an Englishman and published in this country! In fact the recognized work is translated from the French of a Greek professor. Most important for the beginner in commerce is a collection of the actual forms (shipping, consular,

bills of lading, invoices, etc.) necessary for the export and import trade with different parts of the world. These forms vary largely from place to place, and though one may find facsimiles of some in certain books, many more, and those perhaps the most important, are rarely seen outside the merchant's own office. One reason why British traders in the past have failed to get foreign orders in certain instances is because of our habit of quoting for everything in British weights and currencies. Our chief competitors managed things better; they translated their price lists into the language of the country concerned. That is another important thing for the commercial library to do—have on record a tabulation of the values and weights of foreign nations compared with our own. I mean an exact calculation. There are few books which will tell you just what you want to know. Our own official reports have frequently erred in this direction. You find, for instance, a *doppel zentner* referred to as two hundredweights, but it is really only just over 220 lb. An error of 2 lb. per cwt. is not much when you are thinking of small quantities, but when you are dealing with thousands of tons the mistake is a vital one.

There is other material, of course, which a commercial library may require to have, but the above notes will have given, I trust, a good idea of the scope and quality of the literature to be sought for. I have not attempted to detail the requirements of the purely technical library. They are so much more obvious, the field is not so new, and the material is of a particularly definite character. Much more important, for both kinds of libraries, than the collection of masses of material are the arrangements for adequate cataloguing and indexing. A small and select collection of material, well and thoroughly indexed, will be of greater service to the practical man than heaps of literature without proper catalogues and indexes. The commercial library, differing from the general library, can "weed out" thoroughly at frequent intervals. The general library is as much for the historical researcher as for the practical man, but the commercial library is entirely for the latter and can confine its contents to the up-to-date periodicals and books which really matter, thus to a large degree avoiding congestion. Every important article or paragraph in current literature should be immediately indexed under its subject and the entries at once placed in classified order with all other material on the same subject, so that an enquirer can be referred, *at the moment of asking*, to *everything* in the library relating to the matter in question. If this work is to be efficiently carried out, it is obvious that a trained mind will be essential to do it, and it exists in the person of the experienced librarian of to-day, whose invaluable services are at once available. This fact provides a strong argument for the commercial library being placed under the control of the municipality rather than the industry, which, generally speaking, cannot provide the trained librarian from within its own ranks. It has been stated that a library, to be successful, requires

books, building and brains, the latter most of all, and it is not an exaggeration to say that the last two essentials already exist in the municipal library service.

A matter which deserves more attention in this country is the provision of commercial museums or exhibitions attached to the libraries. Exhibition is, perhaps, the better term to use, because museum seems to suggest a collection of dead and forgotten things, which the commercial library, as such, would have little use for. It is astounding to think that the greatest trading nation in history should be without its standing commercial exhibition while almost all our competitors on the Continent long ago made use of the idea as an aid to foreign trade development. The idea of the trade museum or exhibition would be to assist in the technical education of the commercial and industrial population. The complete exhibition would contain examples of production of other days and, as well and mainly, an exhaustive collection of the products of the hour. The first would be invaluable to the historian, the designer and the manufacturer as evidence of the stages of industrial progress, suggesting new ideas for designs and new types for future trade, while the latter would contain productions of all competing nations, providing data for comparing the relative technical and productive ability of nations throughout the world. It is time the United Kingdom possessed a commercial museum worthy of the country. Year after year records are lost to history because no adequate provision exists for their preservation. If there is utility in collecting, at fabulous prices, old books and pictures, old armour, coins and similar things, there must be real and practical value in providing a history of industrial progress by its products. Questions of space and cost immediately arise in this connection, but the former is not so serious as the latter, and the cost will eventually be nothing compared to the gain to the community. Sufficient attention has not been given to the effect on the mind of labour of exhibitions of this kind. They would prove at once to the working classes that other nations besides ourselves are clever at producing things and that other nations (America, Belgium, France, Germany, Switzerland, etc.) are just as adept in using machinery as we ourselves are. Therefore, in addition to its practical uses, the commercial exhibition would do much to improve individual and national pride in workmanship. I do not suggest that these museums should be on the same scale as the magnificent one in Brussels, or that every town having a commercial library should have a commercial exhibition of the dimensions I have stated, but our large industrial centres, at any rate, should be equipped with both museum and library ; one is the complement of the other. The articles which I have particularly in mind as desirable exhibits are raw and semi-raw products of every kind and origin ; imported manufactured articles contrasted with those of home manufacture ; these again contrasted with similar articles of local production, with price, dis-

count, credit, duties, etc., clearly shown in each case, together with railway and freight charges on each and styles of packing in the shape of various goods packed ready for different markets.

These exhibits should be classified on the same scheme as the literary material, thus facilitating reference from library to museum and vice versa, making together what in practice would be an adult school and library, specially for manufacturers, merchants and workmen, but available for the research student and general reader also. Even if accommodation has to be found at the Board of Trade District Office, or in the Chamber of Commerce, an immense advantage is to be gained by having books about, and specimens of commodities arranged by one scheme under one direction. The financing of such an exhibition should surely not be an insuperable difficulty. The Brussels Museum costs, I believe, about £2,000 yearly for maintenance, and it should not be beyond the powers of those interested in each locality to secure such a sum as would be sufficient to maintain adequately an invaluable institution in selected places. The management should be in the hands of a committee including representatives of the library authority, chambers of commerce, technical institutes, Board of Trade, leading trade unions and manufacturers. The matter might possibly be best organized by the provision of a large central exhibition and a number of branches in places where special industries are largely localized. What our continental competitors have found beneficial we, in England, cannot wisely refrain from establishing.

I have deliberately gone into some detail in the foregoing account of what I think is needed in order to add force to my contention, that the means are already in existence for the provision of commercial libraries, etc., on such a scale as to supply adequately what is required. I have already pointed out that the Report I have quoted asks for a new system to be set up side by side with the present one ; a system which will require new accommodation, additional machinery, a new staff, and greater expense, but which will not, as a result, supply more or better books. It will mean that each industry will become a kingdom of its own, governing and educating itself by means of its research libraries, its industrial libraries, its branch industrial libraries, and its technical libraries, in addition to the public library, the university library and the central circulating library. The scheme I would suggest is one which will make the public library the centre of all libraries in the district. The commercial and industrial sections which now exist in many municipal libraries have been built up, not from mere choice, but in response to demands, from an income which, until the Act of December, 1919, was hopelessly inadequate. The necessary development of these sections will, as the Library Association itself has recommended, be better and more quickly accomplished by extending and improving existing libraries, rather than by beginning a new order. The duplication and overlapping which the latter would inevitably produce

would be avoided ; the technical reader and commercial man would have the choice from a much larger number of books ; and each locality would have, in time, a technical and commercial library worthy the name. The control of the library service as a whole should be with the local authority, through its library committee. The financial support expected from the industries (as suggested in the report) for Research and Industrial Libraries, could be given to the municipality for the purpose, and, in return for such support, the industries could have large representation on the library committee, thus ensuring that their needs would have due consideration. The system advocated in the Report can provide no facilities which the scheme I have suggested above could not provide, and the latter can offer many additional advantages, combined with greater efficiency and skill in management, and at very much less cost than would be possible under a new system.

The commercial libraries would be in close touch with chambers of commerce and branches of the Board of Trade, and I hope to see the day when these three institutions will be established under the same roof, or, that being impossible, next door to each other, thus ensuring that all the information procurable will be concentrated at one spot, thereby saving many possibly fruitless journeys from one place to another. Such, then, is the organization I suggest for each locality.

Supplementary to this plan I advocate the formation, in some of the very largest towns, of larger district libraries, somewhat of the nature of the Patent Office Library in London. The object of these district libraries would be to enable those desirous of studying patent specifications of all countries, foreign technical and official publications like the technical and scientific papers and bulletins of the United States Department of Mines, Department of Agriculture, and Bureau of Standards, to do so without having to visit London for the purpose. People in the provinces are considerably handicapped by the fact that there is no public institution outside London on the same scale as the Patent Office Library, where the many special publications I have in mind are collected. Apart from official publications I have mentioned, there are a large number of foreign technical journals which should be represented in the district libraries. The very best journals of all countries would naturally be taken in most of the local commercial libraries, but there are many others which, for reasons of space and economy, it would not be necessary to provide in *every* locality. Each of these district libraries would serve, in the special way I have mentioned, a definite area, and would act as a sort of clearing house of information, would have a co-operative cataloguing arrangement, and be able to intimate to enquirers the nearest library able to meet their demands. Finally, there will be many expensive publications comparatively rarely used, but yet occasionally essential to students and others, which it would be unnecessary and uneconomical for *every* industrial library to purchase, but which should be available for home reading when

required. Such books, I suggest, could by arrangement be procured through the Central Library for Students. My point is that if half a dozen copies of a very expensive book will supply the demand for it, it would be absurd for 500 libraries each to purchase a copy. A subscription annually from the libraries of the country to the Central Library for Students would, I feel sure, bring great mutual benefit.

To sum up, the need for commercial and industrial libraries is obvious and generally recognized, but the cheapest, quickest and most efficient system will be provided by maintaining and improving existing scientific, technical and commercial libraries rather than by founding one or more new systems. Under the former arrangement you have immediately available a stock of books, a trained staff, and, in many places, adequate accommodation; while a new system would start without books, accommodation, or staff. These could only be provided by means of a large expenditure, and, if provided, would result in unnecessary duplication of all three items.

The Indian Currency Report of December, 1919—and after

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The Report of the Committee appointed " to inquire into Indian Exchange and Currency " was based upon a compromise between currency theory and opinions as to the special needs of India. Such compromise is not, in itself, necessarily evil and may, on occasion, afford the only road to a solution of the difficulties of the position, but it involves that very variable factor of personal opinion. At the time the Report was published, many educated members of the population of India were widely at variance with the recommendations made by the Committee, and with the Indian administration. For this reason, it is of some interest to endeavour to separate the two elements of theory and personal opinion in the decisions upon some of the most fundamental of the issues.

The recent complete breakdown of the scheme based upon the recommendations of the Committee renders the long-standing problem of the Indian Currency of a more present interest.

I

It was said, before 1914, that the currency of India was a gold exchange standard currency, i.e., that the currency was ultimately based upon gold outside the country—in this case in London. This position developed from the stoppage of the free mintage of rupees in 1893, and the undertaking to exchange rupees for sovereigns in India, at the rate of fifteen to the £. The rupee circulation was " starved " until ultimately the exchange value of the rupee rose to this level. From that time up to 1914 the exchange had been maintained at the same level by the sale of Council Bills in London, and, in cases of need, of Reverse Bills in India, at prices which kept the exchange within the normal gold points. The currency standard[1] of India was a rupee, but not a silver rupee—it was a gold rupee equal to one-fifteenth part of a sovereign, and was not represented by any full weight coin. The silver rupee coin in circulation in India was a token coin the bullion value of the metallic silver in which was, at the market rate in 1914, about 10d., although it circulated at a value of 1s. 4d.

[1] The term " currency standard " is here used to mean the defined weight of metal the value of which constitutes the standard of value for the country (in this case one-fifteenth of the gold content of the sovereign available in London).

During the war gold standard conditions ceased to exist in London, and rupees were therefore ultimately convertible into pounds sterling in London and not into gold, the former having become depreciated in terms of the latter. Had the old ratio of 15 : 1 been maintained throughout the war, the token rupee would have represented one-fifteenth of a pound sterling, which represented a varying fraction of a sovereign gold.

The normal course of Indian trade before the war left a balance payable to India. This balance was invariably settled, partly by the export of bullion and partly by the export from London of Governmental services. The large sum payable by India for these services made the India Office in London by far the largest exporter to India, and the Bills drawn on India to pay for these services were used, incidentally, as a means of controlling the exchange.

Table I, which has been taken from the *Report of the Indian Currency Committee*, gives the approximate figures for the trade balance in favour of India for each of the ten years before the war (col. 2) and the extent to which the balance was settled by the import of treasure into India (col. 3) and by the import of Governmental services (col. 4), paid for by means of Council drafts. The figure for Council drafts is also affected, however, by movements of the Currency Reserves. The balance not accounted for in cols. 2 and 3 represents the net invisible imports into India (freights, insurance, and banking services, movements of capital, profits, etc.).

TABLE I.—Adjustment of the Trade Balance of India.

Year (1)	Excess of Exports over Imports on Private Account (2)	Net imports of treasure (gold and silver coin and bullion) on Private Account (3)	Net sales of Council Drafts (i.e. Council Drafts less Reverse Drafts) (4)
	£	£	£
1904-5	40,548,200	16,700,600	24,150,000
1905-6	39,086,700	9,646,900	31,886,000
1906-7	45,506,600	14,420,000	34,069,400
1907-8	31,640,000	18,253,300	15,676,700
1908-9	21,173,300	11,116,300	5,335,300
Total	£177,954,800	£70,137,100	£111,117,400
1909-10	47,213,000	20,688,000	27,710,600
1910-11	53,685,300	21,700,000	26,389,800
1911-12	59,512,900	28,706,000	26,917,500
1912-13	57,020,900	29,435,000	25,983,500
1913-14	43,753,900	19,713,000	31,200,800
Total	£261,186,000	£120,242,000	£138,202,200

During the war the balance of trade favourable to India was not only maintained but augmented, as will appear from the following figures also taken from the Report of the Committee:

Year.	Net Exports from India.
1914-15	£29,108,500
1915-16	44,026,600
1916-17	60,843,200
1917-18	61,420,000
1918-19	56,540,000
Average for five years	£50,387,700

This augmentation in the trade balance, which was largely due to favourable European markets, caused the accumulation of indebtedness in London, while one of the means by which such indebtedness had been customarily settled, i.e., the export of gold and silver bullion to India, was no longer available to anything approximating the required extent. As a consequence of this, and also of the fact that military operations in the East were based on India, heavy demands for currency occurred there. Stocks of rupees finally sank so low at the end of 1916 that the amount of Council Bills offered in London had to be limited by the number of rupees available in India with which to pay them. At the same time, the price of silver had been steadily rising, owing partly to a world shortage of silver production (attributable largely to political disturbances in Mexico) and partly to increased demands for the metal. In August, 1917, the price of silver reached the point (3s. 7d. per oz.) at which the Government could no longer afford to buy silver for rupees to be sold at one-fifteenth of a pound each. It was then that the first of the series of alterations in the rate for the sale of Council Bills was made. The rupee was first raised to 1s. 5d., but by December 12th, 1919, it had reached 2s. 4d. after some half-dozen successive increases in the rate.

The position was that, in a country whose currency was based on gold, but where only token silver coins circulated, the Government could no longer afford to make the necessary token coins. A similar position arose in England at the end of the war with regard to the silver coinage, and was met by a short statute debasing the silver coinage to a fineness of one-half. In Canada, Straits Settlements, Holland and a number of other countries where the bullion value of token coins threatened to exceed their currency value, the situation was similarly remedied by debasing the silver coinage. In India, however, the situation was met by leaving the token silver coin intact in weight and fineness, and by altering the currency standard itself—for the rupee was no longer exchangeable for one-fifteenth of a pound sterling, but for a little more than one-tenth of a pound. From the purely theoretical standpoint, this action was entirely unjustifiable.

The Committee stated, on this point, that they could not recommend a reduction in the weight or fineness of the rupee owing to social and economic conditions. The coin had remained unaltered

in silver content since 1835, and, being well known to every village goldsmith, any debasement would have reacted gravely on the credit of the Government. The Report rightly pointed out that a new issue of debased rupees would have driven out of circulation the heavier rupees, and the problem of minting the necessary supply of the new coins would have been great, and the supplies of silver therefor difficult to obtain. There is little denying that the difficulties would have been great, and any attempt to recall rupees useless, but it is highly probable that these difficulties were more immediate and obvious than the disadvantages which flow from the alteration of the standard, which, though more remote, are of the first importance. In this connection the following words in the Minority Report[1] are of interest : " My own belief is that the people of India would prefer debased silver coins to an alteration of the ratio which the raising of the exchange involves." Here the theorist must leave the matter.

The Committee also mention a proposal to issue two- and three-rupee coins, of a degree of fineness less than that of the existing rupee coinage, and also a proposal to issue nickel coins. These involve no new theoretical considerations not mentioned above.

It was also suggested to the Committee that the standard might have been maintained by continuing to offer Council Bills at the old rate, and to meet all demands for currency in India by issuing notes which would not have been convertible into rupees. From the theoretical point of view it matters little, in a gold exchange standard country, whether the currency consists of notes or of token coins : further, it is a matter of no importance that the notes are not convertible into the token coins or vice versa, provided that both are convertible into gold in the foreign centre. This proposition would, therefore, from this point of view, have been equally sound with that to debase the rupee, and it had the additional and most important advantage that notes are more easily, cheaply, and rapidly produced than rupees. Here the practical administrator states that the population of India are relatively unaccustomed to the use of notes, and that all past efforts to develop the circulation would be wasted if the convertibility of the note were in any way modified or suspended, and that the credit of the Government would receive a severe blow. Although this may be true, this course was actually pursued to the verge of an inconvertible note issue—a state which was only avoided by much scheming and restriction on the movement of coin, which caused a discount on notes of up to 19 per cent. in the Central Provinces.

The indebtedness of London to India was met by selling Council Bills and buying Treasury Bills in London with the proceeds. These Treasury Bills were the security against which notes were issued to pay the Council Bills when presented in India. It was thought that the suspension of the Indian currency demand in the silver market

[1] Signed only by Mr. Dadiba Merwajee Dalaal.

would cause a drop in price, but this seems to have been more in the nature of a hazardous hope than a justifiable belief. It is even suggested in the Minority Report that some of the silver already held might have been put on the market with a view to depressing the price of silver. The circumstances which caused the great rise in the price of silver appear to have been much more general than was appreciated by those who thought that a manipulation of the Indian currency demand would suffice to have any marked and sustained effect upon the world price of the metal.

To the extent that the rupee notes were issued against Treasury Bills in order to settle the indebtedness to India, this indebtedness had virtually been settled by inflating the currency. The war caused London to become indebted to New York in much the same way as to India. The New York Exchange, however, was " pegged," and a loan was issued in New York by the British Government. In the case of India the method of issuing, in India, loans by the Home Government does not appear to have been tried on a large scale. This might have enabled the rupee to be kept at 1s. 4d., but it would not have prevented its bullion value from exceeding its currency value. If the rupee had to be retained as a coin, then it must necessarily follow that its bullion value must not be allowed to exceed its currency value. The question *whether* the rupee had to be maintained cannot be answered by the theorist alone.

II

The first effect of the alteration of the standard of value would naturally be expected in the general level of prices. The war covered a period when prices were rising throughout the world. If the prices in sterling were rising, and a fixed exchange with London had been maintained, Indian prices expressed in rupees would have also risen : but if the ratio between rupees and sterling was altered to make a rupee equal to more than one-fifteenth of a pound, then rupee prices would be expected either to fall, or to suffer a retardation in their rise. In the Report it was shown that, while prices in England, according to Sauerbeck's Index-number, had, in 1918, risen 149 per cent. above their level in 1910, rupee prices in India had risen only 84 per cent., according to an Index-number for general prices in India. An incidental effect of the alteration of the standard was reflected in a fall in the cost (in rupees) of home charges incurred in sterling. As against this, the rupee value of investments held in London against the paper (rupee) currency had fallen in value in rupees. The most vital matter for India, however, was the effect of the alteration upon her trade.

Firstly, with regard to the Indian export trade, if exporters wished to obtain the same rupee price for exports as before the standard was altered, they were forced to raise their sterling and other prices expressed in foreign currencies. The raising of prices would cause a redistribution of trade. In those commodities for which the demand

was sufficiently strong, it might be possible to obtain the old rupee prices, but, according as the elasticity of demand for exports was greater, so must the exporter or producer in India bear an increasing share of the difference between the old and new sterling prices.

It would, however, be possible to import at lower rupee prices, as each rupee paid would be of more value to the foreign merchant in his own currency than it was before the alteration of standard.

Further, by tending to neutralize increases of internal prices, the rise in the rating of the rupee should, to a certain extent, relieve the tax upon exports caused by the alteration. The resultant of all these influences is difficult to calculate, and the different results obtained are again attributed to special circumstances. It can, however, be said that, if the prices of imports can be reduced, or prevented from rising, and also the wages and general home cost of production in India similarly affected, then the Indian exporter will not need to increase his prices sufficiently to compensate exactly for the alteration in the value of the rupee. Where is to be found the point of equilibrium between the conflicting forces cannot be said, nor was it possible in December, 1919, to ascertain what would be the relative demands for exports or for imports at the prices fixed at that time. The Minority Report pointed out that the export trade of India is more valuable than the import trade, and concluded that the effect of the alteration would be to encourage imports and discourage exports, and thus diminish the usual favourable balance of trade, and, consequently, relieve the London market of the need for settling in bullion so much of the balance due to India. These propositions may be all quite true as applied to the time at which the change was made, and for a short period after, but the fact must not be lost sight of that international trade is still ultimately a system of barter, and, whether trade is valued in units equal to one or $1\frac{5}{16}$ rupees, the volume of trade would not be permanently affected. From a practical point of view, the period of adjustment to new values is of the highest, and often critical, political importance, and it would seem that the difficulties of this period have been lightly dismissed in the Report when it is stated that such difficulties "are transitory and no longer operative when wages and other elements of costs have adapted themselves to the new level of exchange."

Upon the question of the measures necessary for the future, the Committee expressed their belief in the advisability of again fixing the exchange. Stability of exchange is necessary owing to the strain upon the commercial machine caused by the necessity for frequent adjustments to a new value of the rupee, and also to the inducement provided by a fixed exchange to those having capital available, to invest it in India. Further, the fact that these adjustments are made by official edict introduces the uncertain element of Government control into a matter entirely unsuited to such control. It was generally felt in India that the abolition of this control was of the first importance.

With regard to the method of regulating the exchange, this had been, between August, 1917, and December, 1919, by regulation of the price of Council Bills. It was agreed in both the Reports that Council Bills are not sold for the convenience of trade, but to obtain payment in London for the Governmental exports to India. In the Majority Report it was stated that sales beyond Government requirements might be advantageous, at times, to steady the exchange, and minimize the transport of gold. In the Minority Report the sale of any Bills beyond those necessary to cover Governmental services was condemned. These objections seem to lose sight of the fact that India had a gold exchange standard currency. Such a system normally places the authority controlling the currency under responsibility to place at the disposal of persons tendering token coins, their legal equivalent in gold at a foreign centre. Owing to the customary favourable balance on Indian trade, and the fact that the Government is the main British exporter to India, the currency can be regulated by restriction or expansion of the sale of Council Bills, the former being in place of a sale of London Bills in India. This responsibility for controlling the currency involves, therefore, the necessity for the sale of Council Bills to meet currency, as well as Government needs. Should the sovereign become current in India, or the Government undertake always to give sovereigns for rupees in India, then the gold exchange standard will have to come to an end, and the sale of Council Bills only for purely administrative purposes might be considered.

Upon the fixation of the new rate of exchange the Committee considered that the arrangements made in the United States of America (under the Pittman Act) for the purchase by the Government of all home-produced silver tendered to it at one dollar per fine ounce, until the sales to the East from its currency reserve had been replaced, rendered it probable that the market price of silver would not fall below that price for some considerable time. Having decided to retain in circulation the old rupee, it was necessary to rate that rupee at such a price as would avoid its being withdrawn from circulation for melting. The Committee considered that the price of 2s. (gold) would meet this condition. They accordingly recommended that the necessary measures be passed to provide that the Government shall give rupees for gold at the rate of ten rupees to the sovereign, and for the sovereign to be legal tender for ten rupees. The Committee recognized that, should the price of silver rise to such an extent as would make the rupee worth more than 2s. in bullion, then some emergency measures would be required. This reveals the inconvenience of allowing the standard to be affected by the bullion value of token coins. It further demonstrates the superiority of notes, the use of which would involve similar disadvantages only in the event of the value of the paper becoming greater than the face value of the note—a not very probable eventuality.

It will be noticed that the above ratio is a rupee—gold and not a

rupee-sterling ratio. The Committee considered the choice between sterling exchange and a gold exchange and decided upon the latter, partly owing to the importance of the trade of India with the United States and Japan, and partly owing to the disadvantages attending upon a currency based upon a depreciated currency. It is pointed out that, if a sterling exchange had been decided upon, a higher value than 2s. must have been given to the rupee, and that the rupee-gold exchange would then have been variable. The adoption of a gold ratio involved, of course, a varying rupee rate quoted in sterling, until such time as the pound sterling returned to a gold basis. If the market rate for rupees were always calculated on the basis of the rupee being equal to 12·3 grains of standard gold, there could be little objection to this arrangement, and it would have saved India a tendency to falling prices as the pound sterling returned to a gold basis.

III

The recommendations of the Committee were generally accepted by the Secretary of State for India and on February 2nd, 1920, an announcement was made embodying the principal of the recommendations. It was provided that the rupee should represent one-tenth of the amount of fine gold in the sovereign, and that gold imported into India should be acquired at this rate. Council Bills were to continue to be offered for competitive tender in London, at the discretion of the Secretary of State. When occasion required, Reverse Bills were to be available in India. The sterling rate for Council Bills was to be based upon the sterling equivalent of 11·30016 grains of fine gold, as measured by the New York Exchange, and after deduction for the cost of remitting bullion to India from London. It may be noted, in passing, that the use of the quotation for New York exchange as a basis for deciding the ratio between sterling and gold is open to much comment. In addition to the measures above referred to, the prohibition upon the import of silver was removed, together with the import duty on silver, the prohibition against using gold and silver coin other than as currency and in dealing therein at a premium. The restriction upon the importation of gold was allowed to remain, as a temporary measure, owing to the high price of gold in India. This price it was proposed to reduce gradually, by periodical public auctions, until free import could be allowed without too violent an effect upon the bazaar price of gold. On June 21st, the prohibition against private imports of gold was removed and twenty-one days later the prohibition of private imports of British gold also disappeared. Up to September 8th, the sovereign remained legal tender for fifteen rupees. On that date, an Act was passed by the Legislative Council declaring the sovereign legal tender for ten rupees within the Indian Empire.

The sequel to these measures is of the greatest interest. At the time of the announcement of February 2nd, 1920, the sterling ex-

change price of the rupee was 2s. 10¼d. The announcement came into effect in June, 1920, and the demand for Council Bills fell off and Reverse Bills had to be offered in India, to prevent the rupee from falling in value. After Reverse Bills to the extent of over £50,000,000 had been sold, and sterling resources to meet these Bills upon presentation in London were running low, the Government was compelled to relinquish the effort to maintain the rupee. The sale of Reverse Bills was suspended and the Government withdrew from the market leaving the rupee to find its own level—which level has since fallen as low as 1s. 3d. and on July 1st, 1921, was 1s. 3⅜d. The price of silver bullion fell from 7s. 5½d. per standard ounce in February, 1920 (the highest price reached during or since the war), to 2s. 7½d. per ounce on March 11th, and by July 1st, 1921, was quoted at 2s. 11½d. per ounce.

IV

The reasons for the present state of affairs, and the failure of the measures based on the report of the Committee, can best be appreciated by a consideration of the economic causes of the events which have occurred since 1914 in connection with the Indian currency. Before the war the rupee was merely another name for one-fifteenth of a sovereign: if the rupee showed any tendency to depart from this value, the circulation was increased, or decreased, until the rupee returned to the old par. This adjustment of the circulation was normally effected, as has been stated, through the machinery of the sale of Council Bills in London.

The war involved the discontinuance of the export of bullion to India, and thus eliminated one of the main factors in the settlement of the Indian external trade balance. At the same time exports were being encouraged owing to the keen European demand. Apart from the influence of silver upon the situation, as the general level of prices outside India was rising above Indian prices, converted at the current exchange rate, the normal course would have been for Indian exports to be encouraged and imports discouraged. Large demands for Council Bills would have then followed and, had the old exchange rate been adhered to, large amounts of exchange would have been sold in London. The presentation of the Bills in India would have involved the release of further rupees which, by increasing the currency circulation, would have tended to cause a rise in general prices in India. This movement would have continued until Indian prices, at the existing exchange rate, approximated to the general level of world prices.

As we have mentioned, however, the position was complicated by the fact that the token coins in India were made of silver, and the rise in the value of silver, in August, 1917, caused the rupee to be worth as much as bullion as it was worth as currency. If the old exchange rate had remained unchanged, a profit could have been made by melting down rupees and selling the silver bullion.

The Government could, and did, prohibit the melting of the currency, but in India such a prohibition would be more than usually difficult to enforce. The Government could have debased the token coinage or it could have substituted paper therefor (only a more extreme measure of debasement). By these means the sterling exchange standard, then existing, might have been maintained. In the circumstances already explained, it did none of these things. It pursued the only remaining course of raising the sterling equivalent of the rupee to an amount which would cause the currency value of the coin to exceed its bullion value. Temptation to private melting, and to consequent reduction of the currency circulation, was thus removed. The effect of the step was, as we have pointed out, to cause the level of rupee prices in India to rise less than did the level of prices outside India—merely because the unit in which Indian prices were expressed had been increased. Silver had temporarily taken command of the situation, and had enforced for other than trade reasons a rise in the value of the rupee. The standard of value ceased to be one-fifteenth of a pound sterling, and became a varying fraction of a pound dictated officially from time to time, and guided by the price of silver. India thus adopted something almost the same as a silver standard.

The change involved an increase in the level of Indian prices, when converted at the new rate of exchange, as compared with world prices, and tended, therefore, to encourage imports and discourage exports. This would naturally cause a balance of trade less favourable to India and would normally have reacted to cause a fall in the exchange rate. This reaction could not, however, materialize, owing to the fact that the currency was almost on a silver basis, and the value of silver was decided principally by factors peculiar to itself.

When silver, by a fall in price, relinquished its control of the situation, the tendency to a fall in the rate could materialize. A fall in the price of silver meant that no longer did it happen that a fall in the currency value of the rupee would be followed by the melting down of coin for sale as bullion, until the reduction in the number of rupees in circulation had again increased their value. The rupee could then fall to the value decided by the amount of money work to be done in relation to the volume of currency in circulation and its velocity of circulation, provided it did not, before reaching that value, arrive at the point at which the rupee was, at the then price of silver, worth as much as bullion as it was worth as coin. If the bullion value of the rupee fell below its currency value thus determined, the rupee would then again possess a scarcity value, as was the case before the war. India would also then have changed back from an almost silver standard to a " sterling exchange standard."

The money work to be done depends, however, on the general level of prices prevailing in the country, and the volume of trade. The fall in the rate of exchange would cause a fall in Indian prices, as

converted at the new rate, and would be expected to be followed by a period in which Indian exports increased and imports fell. The fall in the value of silver commenced in February, 1920. At this time world prices were falling. Before the fall in the exchange value of the rupee could be effective in enabling India to sell more profitably and buy more cheaply, and have the expected effect on the trade balance, that fall would have to be more than sufficient to neutralize the fall in external prices.

The changes which did, in fact, take place in the trade of India can be ascertained from the Government returns. For the year ended March 31st, 1920, the trade balance *in favour of India* was 93¾ crores of rupees, while for the eleven months ended on February 28th, 1921, the balance, *adverse to India*, amounted to 45 crores 33 lacs of rupees.

With such an adverse balance of trade, the value of the rupee could be maintained only by borrowing abroad, or by obtaining repayment of a loan abroad. The latter course was pursued. The state of trade, as shown by the trade returns, naturally caused a falling off in the demand in London for exchange on India. On January 5th, 1920, tenders were asked for Rs. 80,000,000 of Council Bills, but tenders were obtained for 57,000,000 rupees only, and, as the rates offered were so low, the sale of Bills was temporarily discontinued. Finally the demand arose in India for London Bills and Reverse Bills were sold there, and met in London by paying them out of the sterling resources accumulated when the balance of trade was in favour of India. These resources were drawn on to the extent of £50,000,000 before their failure caused the discontinuance of the sale of the Bills in India. Thus was given up the attempt to reduce the circulation of rupees in India to such a size that the rupee would possess a scarcity value of 2s. (gold).

The actual relation between the exchange value of the rupee and the price of silver is shown by Table II. In col. 2 is given the spot price for silver per ounce (·925 fine) in London, and in col. 4 is given the value of the silver contained in the rupee (1·65 grains of fine silver) at the price in col. 2. Col. 3 gives the actual exchange quotation for the rupee. Generally, until June, 1920, the exchange quotation followed the silver quotation down, but with a varying "lag." Between June and the end of September, 1920, Reverse Drafts were being sold, and the exchange was thus kept at about 1s. 10d. per rupee. This encouraged a reaction in the price of silver. After the sale of Reverse Bills was given up, at the end of September, 1920, the quotation for silver and the exchange rate moved fairly closely together, until the latter reached 1s. 5d. Although the silver quotation continued to fall, the exchange rate fell much less slowly—presumably subsequent movements were only indirectly connected with the price of silver, as at or about 1s. 5d. the rupee appears to have reached what was, for that time, its "currency value" above referred to. Temporary and superficial influences,

such as speculation and special demands for silver, would be expected to prevent a much closer connection between the silver quotation and the exchange rate than is shown by the table.

TABLE II.—The Relation between the Price of Silver and the Indian Exchange Rate.

Date (1)	Spot cash quotation for silver in London per oz. standard ('925 fine) (2)	Rate quoted in Calcutta for transfers on London (p. Rupee) (3)		Value of silver contained in the Rupee at the quotation in Column 2 (4)	
1920	d.	s.	d.	s.	d.
Jan. 2	75·875	2	3·3125	2	4·225
,, 9	78·5	2	4·375	2	5·202
,, 16	77·0	2	3·875	2	4·644
,, 23	79·875	2	3·9375	2	5·713
,, 30	84·125	2	3·8125	2	7·294
Feb. 6	88·0	2	8·75	2	8·702
,, 13	84·75	2	9·125	2	7·526
,, 20	83·75	2	8·0	2	7·155
,, 27	82·75	2	7·25	2	6·783
Mar. 5	77·875	2	7·375	2	4·973
,, 12	70·0	2	5·75	2	2·014
,, 19	70·625	2	4·5	2	2·343
,, 26	71·0	2	4·5	2	2·385
,, 31	72·625	2	4·125	2	3·026
April 9	69·875	2	3·625	2	1·993
,, 16	67·75	2	3·75	2	1·203
,, 23	69·5	2	3·875	2	1·923
,, 30	64·5	2	3·75	1	11·994
May 6	60·0	2	1·75	1	10·297
,, 13	58·125	2	2·125	1	9·622
,, 20	58·25	2	1·625	1	9·669
,, 27	59·375	2	1·25	1	10·087
June 4	56·875	2	1·25	1	9·157
,, 11	51·25	2	0·25	1	7·065
,, 18	49·125	1	10·8125	1	6·274
,, 25	50·25	1	10·0	1	6·693
July 2	51·125	1	9·75	1	7·018
,, 9	52·25	1	10·375	1	7·437
,, 16	52·75	1	10·25	1	7·623
,, 23	54·375	1	10·75	1	8·227
,, 30	56·25	1	11·375	1	8·925
Aug. 6	59·75	1	10·75	1	10·217
,, 13	59·25	1	10·75	1	10·041
,, 20	63·75	1	10·25	1	11·715
,, 27	61·0	1	10·75	1	10·671
Sept. 3	59·0	1	10·0	1	9·925
,, 10	59·0	1	10·125	1	9·925
,, 17	60·0	1	10·6875	1	10·297
,, 24	59·375	1	10·375	1	10·136
Oct. 1	59·0	1	9·625	1	9·925
,, 8	56·125	1	8·0	1	8·878
,, 15	53·625	1	8·0	1	7·948
,, 22	52·625	1	7·625	1	7·576
,, 29	52·375	1	7·625	1	7·483
Nov. 6	53·875	1	8·25	1	8·051
,, 13	53·875	1	8·25	1	8·051

TABLE II.—*continued.*

Date (1)	Spot cash quotation for silver in London per oz. standard (·925 fine) (2)	Rate quoted in Calcutta for transfers on London (p. Rupee) (3)		Value of silver contained in the Rupee at the quotation in Column 2 (4)	
1920	d.	s.	d.	s.	d.
Nov. 20	49·875	1	7·25	1	6·553
,, 27	48·75	1	6·75	1	6·135
Dec. 3	44·75	1	5·9375	1	4·647
,, 10	38·875	1	4·9375	1	2·461
,, 17	41·0	1	5·125	1	3·236
,, 24	40·625	1	5·25	1	3·111
,, 31	40·875	1	5·6875	1	3·205
1921					
Jan. 7	41·5	1	5·75	1	3·438
,, 14	40·0	1	5·375	1	2·865
,, 21	40·0	1	5·4275	1	2·865
,, 28	37·75	1	5·25	1	2·033
Feb. 4	36·25	1	4·875	1	1·485
,, 11	36·25	1	4·625	1	1·485
,, 18	33·875	1	4·25	1	0·601
,, 25	31·375	1	3·25	0	11·571
Mar. 4	31·125	1	3·375	0	11·578
,, 11	31·5	1	3·25	0	11·718
,, 18	32·625	1	3·375	1	0·136
,, 23	33·0	1	3·875	1	0·263
April 1	32·5	1	3·75	1	0·090
May 6	34·75	1	3·6875	1	0·927
June 3	33·875	1	3·25	1	0·601
July 1	35·25	1	3·375	1	1·113

Added to the factors already mentioned as responsible for the exchange situation, there were also certain secondary influences at work. There was probably some commercial inflation in India, and the alterations of the exchange rate have probably caused considerable shifting of trade. It is also believed that the high value of the rupee caused considerable withdrawal of capital from India.

In the events that occurred during the war the gold exchange standard had necessarily to give way to a "sterling exchange standard." The decision to retain the coined rupee involved a further change to an almost silver standard. The fall in the value of silver again proved the unsuitability of that metal as a basis for the currency, and an attempt was made to re-establish the gold exchange standard at a new ratio. The sterling resources proved insufficient to maintain the new ratio and the rupee had to be set free. The continued closure of the mint to the free coinage of silver gives the rupee a certain scarcity value over its bullion value. Just as after the decision to close the mint in 1893, a number of years elapsed before the "starvation" of the circulation and the expansion of trade together caused the volume of trade to "grow up to" the volume of currency, and the rupee to rise to 1s. 4d., so it may be imagined that the same influences may now, in time, cause a rise

in the value of the rupee to what is still the official rate, viz., 2s. The period required may, however, be very long, for we are not yet justified in believing that the present quotation is on the level dictated by trade and currency conditions.

The whole of the exchange trouble with India during the war seems to have hinged upon the decision to retain the coined rupee.

Siberia in 1919

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My only claim to write on Siberia is founded upon my presence there for nine months of the year 1919, during which time I was attached to the staff of the British Military Mission, commanded by General Sir Alfred Knox, K.C.B. Consequently, I should be loath to contribute a narrative of personal experiences to an economic journal, where it will presumably rub shoulders with the fruit of years of patient research, but for the following reasons, viz. : that I have been asked to do so, and owing to a certain peculiarity in the subject.

There are few places on the earth's surface about which the majority of mankind have such definite ideas with so little personal knowledge as Siberia ; and therefore, if my remarks serve to demolish any erroneous opinions still lingering in the minds of my economic readers, I shall feel myself justified. The Naval Intelligence Staff have recently published an entertaining and instructive *Handbook of Siberia and Arctic Russia*,[1] to which I would refer those interested, as well as to the writings of the late Miss Czaplicka for the more remote regions.

Siberia has long proved an irresistible lure to novelists seeking a romantic setting for their plots (mostly relating the sufferings of a high-souled young revolutionary under the Tsarist regime) ; and their imagination has often depicted Siberia as a truly fearsome place, a kind of annexe to the Arctic regions, perpetually covered with ice and snow, where the crack of the cruel knout is only interrupted by the baying of famished wolves. This picture is entirely misleading. The winter of Siberia is certainly bitter, as low a temperature as −90° Fahr. having been recorded in the valley of the Yana (perhaps the coldest spot on earth) ; but summer, even in this inhospitable region, is comparatively warm, as the temperature averages about 60° Fahr. In the zone of southern Siberia, in which nearly all the towns are situated, the summers are sometimes very hot (we had 90° Fahr. in July at Irkutsk) ; and a notable feature of Siberian weather is the large proportion of bright, sunny days, except on the Pacific coast, which has a heavy rainfall. Vladivostok, however, being so far south, enjoys a more moderate climate, with a good deal of fog in summer.

In 1919, to traverse Siberia from Vladivostok to Omsk required nine days under the most favourable circumstances, and it must be

[1] Vol. I (General), H.M. Stationery Office, 1920. 7s. 6d.

admitted that Siberian scenery is somewhat monotonous at any season. Not that there is any sterility apparent to the eye, for even the vast steppes of Manchuria, which is crossed by the direct line, are clothed in green in summer ; it is rather that the uniform prettiness of the landscape becomes wearisome, unrelieved as it is by any boldness or grandeur of form, except on the immediate shores of Lake Baikal, which are rugged and beautiful, recalling Swiss scenery. In winter the endless succession of white-clad hill, valley and plain is even more irksome. There are, however, certain broad differences in the character of the regions traversed : from the coast inland for the first few hundred miles the country is hilly and somewhat bare ; Manchuria is mostly rolling steppe land, save the Khingan range, where the railway constructors have put in some remarkable engineering ; Transbaikalia is a well-watered land of hills and dales ; beyond Irkutsk, the spurs of the Sayansk Mountains reach out northwards, and there are stretches of dense forests ; beyond the River Ob, the steppe extends in a level plain almost to the Urals.

Lofty mountains there are on the Mongolian frontier, behind the rich pastures of the Altai ; but loftier than these, and surpassing Mont Blanc in height, are the pair of active volcanoes in the remote rain-sodden peninsula of Kamchatka. (By the way, it is an interesting commentary on the difference of climate on opposite sides of the globe that Kamchatka, of which one thinks as another Ultima Thule, corresponds very fairly to the British Isles in latitude.)

We all remember the rivers of Siberia, the Ob, Yenisei, and Lena from our school days, and I must confess to a certain elation when I saw these mighty streams, which surpass other Asiatic rivers both in length and breadth. The Lena, I believe, at some part of its course is many miles across ; but the last-named river flows through the wild north-east, near the region of bitter cold previously referred to, and not many Europeans trouble to visit its shores. The Ob is a turbid stream, the Yenisei is cold, swift and crystal clear in its upper reaches ; the railway crosses them by finely built bridges of six or seven spans ; in their lower courses they become immense sheets of water, flowing gently through the desolate tundra, where nothing grows higher than six inches above ground, till they meet the waters of the Arctic Ocean. Owing to the dispensation of Nature which set Siberia on a downward slope from south to north, this is the common fate of all the great Siberian rivers, save only the Amur, which flows into the Pacific north of Sakhalin ; but considerable efforts are being made to facilitate the transport of goods down the Ob and Yenisei via the Kara Sea and Novaya Zemlya to European ports. This is the only chance for the great timber resources in the basins of these rivers, as they will not bear the cost of a long railway journey.

Wild animals do not generally obtrude themselves on those engaged in military service, except in hot climates ; I believe, how-

ever, that wolves are to be met with in the great forest tract about Tomsk, called the "taiga"; but much more offensive and less retiring in their habits are the "taiga" mosquitoes, which compel the whole population of certain villages to wear veils.

Trees in Siberia do not as a rule attain great proportions, except some of the fir tribe; very common on the western steppes are groves of the silver birch, whose crowded stems dazzle the eye by their whiteness, and under whose scanty shelter numerous refugees from the Bolshevik advance led, at the time of which I wrote, an airy but comfortless existence.

Native tribes are to be found all over Siberia, even in the least inviting parts, the Yakuts of the north-east being a sturdy tribe, and particularly skilful at driving a bargain; in the south the most commonly met with are the Kirghiz of the western steppes, and the Buryats in the Transbaikal province, both of them little swarthy fellows of a Mongolian type, and excellent horsemen. I had the misfortune once to help to stampede with my horse a number of Kirghiz cattle, and for this reason perhaps the tribe seemed to me unfriendly.

The Russian population naturally keeps to the zone of towns, which extend along the old post road (called "Trakt") from the gap in the Urals near Ekaterinburg to the Amur valley. It follows the line of the successive waves of Russian immigration, still marked by old dismantled forts in Omsk and other large towns, erected as defences against the native tribes. These, I may observe, are the only old buildings in Siberia. The Trans-Siberian railway (begun in 1891 and completed in 1905) follows the post road closely, making a detour north to avoid the Sayansk range, and south to escape Lake Baikal. The latter, a beautiful and very deep lake of great size, ringed about by lofty hills, was for a long time a stumbling-block in the construction of the railway; rails were laid on the ice during the winter, and a ferry completed the gap in summer.

A few words on life in the larger Siberian towns. Vladivostok is the only one which could be described as a city, although the inland towns often cover considerable space; it possesses some five or six miles of paved road, boasts of horse-trams, a cathedral, a triumphal arch and two large stores run on European lines. The harbour, called the "Golden Horn" from its shape, is as fine as any on the east coast of Asia; there are rows of warehouses along the quay, and the railway station, which is a handsome erection with some pretensions to architectural beauty, befits the dignity of the terminus of the longest railway in the world. But withal Vladivostok is a squalid place. Once leave the main street and the side alleys are hardly distinguishable from the stony hillside, pigs roam to and fro amongst the garbage, and the pavement gives place to an elevated and rickety line of planks. Vladivostok, once Chinese territory, is still largely inhabited by the yellow races; the coolies there have an elaborate wooden contraption on their backs, with the aid of which

they can carry anything short of a grand piano, but rikshas have given way to droshki of ancient appearance and great discomfort.

A Russian crowd moves very slowly ; the Muscovite hates to be hurried, he is mostly unpunctual, and the departure of trains is announced by three bells rung at considerable intervals to warn the dilatory to hasten. The droshki, however, fly over the ground, and I have been thrown out more than once from these perilous vehicles.

The inland towns show even fewer signs of Western civilization than Vladivostok, which is still far from being worthy of its name " Ruler of the East " ; the streets, however, are more spacious, as the houses are mostly built (not inartistically) of wood, and the danger of fire is always present. The unpaved streets are swept by maelstroms of dust in summer, and are converted by rain into seas of mire, into which the barefooted Siberian townswomen plunge fearlessly, while their booted husbands skirt the edge of the morass. Commerce does not flourish in the interior, shops are few and far between, and do not usually rise above the level of the " melochnaya," corresponding to our village general shop ; one notices, however, the offices of the big co-operative societies, such as " Tsentrosoyuz " or " Zakupsbyt," in the larger towns, and the Japanese are making efforts to capture all the commerce they can, especially east of Baikal.

The most pleasing buildings in Siberia are the churches, which are all built in the Russian style, basilicas with gaily-painted walls and gilded cupolas, and often stand in their own little parks ; they are clean outside and in, which is more than can be said of most other buildings. The Siberian was (and will doubtless remain so, in spite of Bolshevism) profoundly religious, and the services he attends do not make great demands on his intellect, being largely composed of ritual observances, which seem to enter into the details of his life. For example, most of the larger railway stations have ikons and candles lit in the waiting-rooms, before which the peasants may be seen writhing in complicated prostrations ; and I have witnessed at Omsk a homely ceremony enacted, called in Russian the " blessing of the horses." The cab-horses, droshki and all, were driven round in circles and aspersed by the priests with handfuls of the newly-grown oats dipped in holy water ; they were then given a double ration and freed from work for the day !

Irkutsk has been called " the second Moscow " from the number of its churches, all comparatively new, which bid fair to outnumber the worshippers. It is a pretty town, cleaner than most, and its picturesque pile bridge withstands with difficulty the force of the rushing Angara, the outflow from Lake Baikal.

Tomsk possesses a university, which accommodated, in 1919, an English training school for officers of the White Army, such as was also installed at Russian Island, near Vladivostok.

This brings me to the question of the political situation in that year, and the presence of the Allied Missions in Siberia. The rise and fall of the Kolchak government is already an old story as far

as its effect on present-day politics is concerned, but still recent enough to demand discretion on the part of one who was present in an official and confidential capacity, however obscure. I may be forgiven, however, if I briefly run through the course of events in Siberia which culminated in the execution of Admiral Kolchak by the Reds, as these stirring occurrences are apt to be forgotten on the other side of the globe, amid the excitement of industrial and other conflicts nearer home.

The Czech prisoners of war in Russia had been promised liberty and repatriation on the establishment of Soviet rule ; but as the result of Bolshevik perfidy they were unable to take the direct route homeward, and were obliged to make their escape in an armed body through Siberia under the command of one of their number, a young colonel named Gaida. On their way eastward they suppressed any attempts at Bolshevik government, reaching Vladivostok, which they liberated in June, 1918 ; an event the anniversary of which in 1919 put the local peace celebrations somewhat in the shade.

There was accordingly no recognized central authority throughout Siberia, and to mitigate this state of anarchy a Directorate was formed under the presidency of one Avksentiev, in September, 1918, to resist the spread of Bolshevism eastward, and with a view to setting up a Constituent Assembly for all Siberia. This much canvassed measure, however, remained in the air, and in November Admiral Kolchak, who was Minister for War under Avksentiev, effected a *coup de main* at Omsk and proclaimed himself Supreme Ruler.

The Allied units which had been sent out to assist the Directorate with advice and supplies, transferred their attention to the new Government ; and thenceforth the railway line on which Kolchak depended for supplies was parcelled out between the Allies, the British Railway Mission taking charge of the section forward of Omsk, which varied greatly in length with the fortunes of the White Army. Many of the Allies established front and rear headquarters, and much of General Knox's time was occupied in travelling backwards and forwards in his private train.

Kolchak's General Staff took possession of a very large and imposing building which had just been completed at Omsk as a headquarters for the railway company, and proceeded in the spring of 1919 to develop a fierce attack on the Bolshevik positions, which lay roughly in a line with the chain of the Urals. Abundant supplies, especially of surplus British equipment, were sent out via Vladivostok, British officers volunteered to instruct the Russian " Junkers " (i.e., cadets) in the latest results of experience on the European fronts, and British troops (a battalion of Hampshires) paraded the streets of Ekaterinburg and Omsk to show the Russian recruits what could be done in the way of smartness and intelligent military discipline. Their importation of Western methods was sometimes even too

much for the simple Russian, and rumour has it that an incinerator, constructed after the latest Army pattern with bricks brought miles for the purpose, was promptly extinguished and razed to the ground by the local Ekaterinburg fire brigade. Most of the Allied personnel, however, remained at Vladivostok, whither Col. John Ward retired with his Middlesex Labour battalion, having been first on the scene and present at Kolchak's *coup de main* at Omsk.

The difficulty of maintaining telegraphic communication between the two headquarters and home was only second to the task of protecting nearly 4,000 miles of metals from local Bolshevik attacks ; indeed, in parts of the line wrecks were so numerous that one passed the rusty remnants of trucks and engines every few hundred yards. Moreover, the behaviour and dispositions of some of Kolchak's nominal allies were a source of apprehension ; more especially two Cossack "atamans," or chiefs, through whose country the railway ran. One of them, Semyonov, was a picturesque person who fancied himself cast for the part of Napoleon ; he was not above interfering with stores on the way to the front, to which place his enthusiasm for Kolchak's cause did not lead him to follow. As Cossacks, however, both could be trusted not to throw in their lot with the Reds, who would be unlikely to recognize their Cossack prerogatives in the matter of land and taxation, and so forth.

In spite of these various difficulties the White Armies achieved a notable advance of several hundred miles, communication with General Denikin was nearly established, and Kolchak was daily expecting official recognition from the Powers, which would have meant even more strenuous measures of support, when the debacle occurred at the beginning of July, 1919.

The White Army, elated by success, had pushed on too far in the direction of Samara in European Russia, and their left flank was left uncovered ; the treachery of one unit enabled the Bolsheviks to strike on the exposed flank, and a retreat began in which Kolchak's forces had little respite till they had retired behind Ekaterinburg, out of which the British Railway Mission had only just time to clear their rolling stock.

Owing to the immense area of operations and the smallness of the armies on either side, the fighting was not as a rule intense, judged by European standards ; but the difficulties of keeping touch and distributing supplies were so great that I imagine the White Armies suffered as much from the conditions of active service as from the assaults of the enemy. A temporary stand was made forward of Omsk, but the headquarters were in considerable danger ; a Provisional Government was set up at the base by a progressive section, which was joined by Gaida, who had been Commander-in-Chief, but had had disagreements with the Russian generals, and had been deprived of his rank. Kolchak now made a bid for favour by reviving the promises of the Constituent Assembly, but it was too late ; popular enthusiasm had never been high on his side, and despite

his fine-sounding title he never acquired a real hold on Eastern Siberia, where the Japanese influence was paramount, and the people had not suffered sufficiently from Soviet government to oppose it heartily.

By this time it was evident that Kolchak's authority was doomed, his army melted away, and Denikin in South Russia was held up for lack of support on his right. Many of the Allied naval and military forces were sent home, some of the staff remaining to keep in touch with the situation.

What followed, in the words of the Greek chorus, " I neither saw nor do I relate " ; the newspapers reported the successive fall of Omsk, Tomsk, and Irkutsk, and finally the Czechs threw in their lot with the Provisional Government, and Kolchak with his Prime Minister, Pepelyaev, were handed over to the Reds and duly shot.

So ended the last of Mr. Churchill's military adventures, with results very similar to the Gallipoli fiasco, at which I had also the honour of serving.

Closely allied with the fate of Admiral Kolchak, and following the vicissitudes of his varying fortunes, was the Siberian rouble, more especially the Omsk rouble ; for by the autumn of 1919 Kerenski paper had been withdrawn (officially) and " Romanoffs " had become beautiful rarities. The Omsk Government maintained for some time a keen competition with the Bolshevik central authority as to who could turn out most paper in a given time ; with the result that this thriving industry provided also the principal object of Siberian commerce, the Chinese at Vladivostok especially making fortunes by the exchange. Holders of Siberian notes, however, lost in the long run, for the rouble which stood at about 50 to the £ in the winter of 1918-19 fell with occasional rebounds to something like 1,000 to the £ at the end of the year. Trade in other goods was at a low ebb, for with the western gate closed and the rail to Vladivostok generally commandeered for military stores, there was little chance to export ; moreover, even at the base itself, I saw huge masses of material, mostly cotton, rotting for want of ships to take it away. This happened to be imported merchandise awaiting re-export ; but we were informed that certain Siberian mines contained a year's output of which they were unable to dispose—but no doubt the Bolshevik advance settled this difficulty for them!

The question of industry in Siberia is too large a subject for me to attempt, and is dealt with fully in the Handbook referred to above. I noticed, however, that most of the manufacturing industries were situated not in but near large towns, while those depending on the extraction of ores or timber-cutting are found where these products abound. Gold comes from the Lena valley, and is extracted mainly by washing, but the climate in those parts resembles that of Alaska, and transport being more difficult the produce is not very great. Cereals are the great export of Western Siberia, grown on the belt of fertile black earth between the Urals and the Altai.

The townsfolk seem to engage largely in industries carried on at home, which are called "kustarny"; one very attractive kind of peasant handiwork that I came across was the carving of mammoth ivory, which has a pink tinge, though sometimes coloured by the chemical constituents of the mud near the great rivers in the north where the huge bones are found. Some specimens of this craft would compare with the best Indian or Chinese carving.

In conclusion, I may say that I found such of the Russian "intelligentsia" as I encountered very charming in social intercourse, though somewhat retiring; the senior military officers, whatever their treatment of their own subordinates, were uniformly polite to foreigners. Having with difficulty attained to a small knowledge of Russian, I found that I could converse with equal ease (or otherwise) with inhabitants of all parts of the country, the population being too new for dialects to have sprung up, except those, of course, introduced from Russia. The common Russian, whether peasant or workman, is an amiable fellow enough; he does not expect much of life and seems to take misfortune with some dignity: the war had not left him much patriotism, nor, on the other hand, did there seem to be any enthusiasm for Bolshevik doctrines. One hungry workman who ran amok and began swinging a heavy chain round his head to the tune of "Svoboda! tysecha rublei!" ("Liberty, a thousand roubles") was very promptly quieted with a five-rouble note and a hunk of bread; this was the only revolutionary that I met in nine months.

Whatever hold Bolshevism may have obtained in Siberia will have been through the acquiescence, not the co-operation, of the majority of the people.

Co-operation in Russia

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THE SOCIAL AND POLITICAL DOCTRINES OF RUSSIAN CO-OPERATION.

For a thorough comprehension of Russian Co-operation, a knowledge of its actual accomplishments is not sufficient. It is necessary to go behind these accomplishments, and learn something of the spirit and principles which provide the moving force for them ; and the latter can only be understood by reference to the origin of the movement. Co-operation in Russia cannot be said to have originated in a spontaneous effort on the part of the working classes to combine in order to secure an amelioration of their material conditions. It is rather the creation of a set of men whom we may call the " intellectuals," who have worked out a theory of co-operation, for which type of economic activity they think Russia is particularly suited.

These " intellectuals " are drawn in the first place from the ranks of the poorer nobility, who were still further impoverished by the Emancipation Act of 1861, and in the second, from the numbers of self-made men, who by their own efforts have become educated, and raised themselves above the social position in which they were born. Hence follow two characteristics of Russian co-operation, the wideness of its scope, and its close connection with political matters. It is by no means a narrow, purely materialistic movement, aiming simply at increased efficiency in the production and marketing of goods, with the resulting economic benefit to its members. On the contrary, it aspires to the position of a wide and comprehensive science, embracing many important subjects, and including even international activities in its aims. In Russia, as elsewhere, radicalism is the natural outcome of the combination of higher education with poverty ; further, it must be remembered that the Russian genius is very prone to go to extremes in all things, considering moderation to be on a par with hypocrisy. Essentially, therefore, the leaders of co-operation, especially those drawn from the first class, were opposed to the existing structure of society, and were out for reform ; hence, in its capacity as a social reformer demanding democracy, co-operation found itself in conflict with the governing body, whether in the person of the Tsar or of Lenin.

For a statement of the doctrines of co-operation, both from the social and the political point of view, we may refer to the writings of Mr. V. F. Pekarski.[1] In the social-economic sphere, co-operation

[1] K. I. Morosov, *The Social Nature of Co-operation*, p. 52.

seeks to raise the standard of education among the workers, along technical, and also along more purely cultural lines. As a necessary preliminary to intellectual and moral progress, it strives to ameliorate the material condition of the worker, to lend him a helping hand in the continual struggle for existence. It introduces an element of the ideal into business relationships by endeavouring to substitute a spirit of service for the selfish battle for gain. And all this it does, not in a philanthropic manner, but by helping the people who enjoy those benefits to secure them for themselves by their own efforts. In the political domain, it aims at making its activities a training-school in true democratic principles, to secure the submission of the minority to the will of the majority in the community.

The leaders of co-operation did not find it necessary to create new organizations to carry out the principles outlined above. Deep-rooted in the national life of their country, they found two institutions which were admirably suited, in their opinion, to serve as the necessary groundwork, and which had already produced among the workers the mentality required for successful co-operative effort. These institutions were the "Artel" and the "Mir."

The artel, the earliest form of co-operation in Russia, we find legally defined in the second chapter of J. V. Bubnov's book, *The Co-operative Movement in Russia*, as follows: "An artel is an association formed to carry out specified units of work, or carry on certain industries, or render personal services, *on the joint responsibility of the members of the artel, and for their joint account.*" Artels were formed among bricklayers, carpenters, and similar workers, who sold their labour co-operatively for a specified unit of work. But they were also formed among the "kustars," or peasants who plied their trade at home, and in the working up of agricultural produce, where they partook of the nature of true co-operative productive societies. Often they were merely temporary, holding together during the winter season, and falling to pieces with the approach of spring, when most of the workers returned to their normal occupation of husbandry. But at any rate, they accustomed the workers to the idea of conscious co-operative effort in the industrial sphere; and they may be said to be the groundwork upon which were built up the great Producers' Societies of later days.

The mir, or village assembly (connected with which is the "obshchina," or land community), is an equally integral part of Russian life, and one with which every student of Russian affairs is familiar. In it, the leaders of co-operation thought they saw a suitable groundwork for their activities, but it is open to question whether its structure was really such as to foster a true co-operative spirit. Undoubtedly these assemblies did provide a valuable training school in democratic principles, by accustoming the peasants "to work together, to make concessions for the communal welfare, and to bow unreservedly to the will of the mir."[1] But essentially, co-operation

[1] Sir Donald McKenzie Wallace, *Russia*, ch. viii.

implies a free voluntary association of workers for mutual assistance and benefit, hence the fact that membership of the mir was compulsory, robs it at once of one vital feature of a co-operative organization. Further, the strong tendency towards individualism was, at the close of the nineteenth century, beginning to break up the old patriarchal system of family life, and therefore the mir, which was founded upon that system.

Since co-operation admittedly aims at the reconstruction of society on a new economic basis, it remains to enquire wherein it differs from other socialistic schemes which have the same end in view. From the point of view of France, this is done by Prof. Charles Gide in an address on " L'avenir de la coopération."[1] He seems to think that the principal reason for the failure of co-operation to arouse the enthusiasm of the masses in that country, is that the workers believe in revolution as a surer and quicker way of obtaining social reconstruction, rather than the slower policy of evolution advocated by co-operators.

The problem in Russia presents a different aspect from the problem in other European countries. In Western Europe generally, manufacturing industry is highly developed, hence the divorce of the worker from the soil and from the instruments of production, bringing into existence the " proletariat." Co-operation can therefore appeal to the bulk of the population in its efforts to annul this divorce, and again put the worker in possession of the instruments of production ; not, indeed, individually, since modern large-scale production renders this impracticable, but in associations. In Russia, however, the vast bulk of the population is agricultural ; hence schemes for redistribution, particularly as applied to land, have inevitably had a wider appeal than any schemes for the improvement or modification of manufacturing production. These schemes of redistribution have been mostly on a collective basis, and to collectivism co-operation is opposed on two grounds. In the first place, co-operation does not seek to abolish private property, which is anathema to the collectivist. On the contrary, as we saw, it seeks to consolidate it, on an associative basis. Again, collectivism implies State action and control, both of which co-operation distrusts, since it has no belief in the power of the State to reorganize society by issuing laws.

With regard to Britain, the question of a political alliance or fusion between co-operation and labour, was raised at the recent Co-operative Congress at Scarborough. In a highly industrialized country like our own, co-operation necessarily assumes the character of a " town-consumer " movement, and the question is one of great practical importance, since the majority of the members of co-operative societies, at least in some districts, are also members of the labour movement, through their adherence to a trade union. But in Russia, co-operation is essentially " agricultural-productive "

[1] *Tracts on Trade*, No. 10, Paris, 1888.

in character, and the question as we see it can scarcely arise, at least not until the process of "industrializing" the country has advanced considerably.

THE GROWTH AND DEVELOPMENT OF THE MOVEMENT.

An attempt to form an accurate estimate of the growth and accomplishments of the co-operative movement in Russia, is fraught with difficulties which would not be met with in making a similar attempt in our own country, for instance. For at no period of its history has the movement been left free to develop as it wished. Under the Tsarist régime it was unduly hampered by the fact that the Government considered a policy of police supervision necessary lest the organizations should be used for political ends; after the Revolution it was unduly favoured by the destruction of private trade, which left it in many fields in the position of a monopolist. There never has been the free competition between State, private, and co-operative enterprise, which exists in our own country. These considerations must be borne in mind, as otherwise, mere facts and figures—even if it were possible to obtain absolutely accurate ones—would give a very misleading picture of the true growth of the co-operative movement.

Co-operative societies are grouped under five main heads, namely, Consumers', Credit, Industrial, Agricultural, and Mixed, and the first one was formed as early as the year 1865, in a village in the government of Kostroma.[1] Although it was soon followed by others, these pioneer societies found their progress impeded at every step. Before a society could commence operations, it had to gain from the Government the recognition of itself as a legal person, and the Government would only grant the statute giving this recognition on the recommendation of its local representative. In making his report the latter was influenced, not unnaturally, by a consideration of the possible political, as well as the purely economic, results of the establishment of such a society. And if he thought these results would tend to endanger the social order and stability which it was his first duty to preserve, he would, of course, send an unfavourable report to the central authority, and the society would not get its statute. The nature of the local representative's report might even depend on whether or not the particular "intellectuals," who were foremost in organizing the proposed society, were personally obnoxious to himself. Hence it was with great difficulty that the co-operative societies could make any advance, since their very formation depended on the caprice of an individual, who could not always be relied upon to be a competent and unprejudiced judge.

If single societies found themselves hampered by bureaucratic distrust and opposition, still greater were the obstacles thrown in the way of the formation of unions of such societies; for obviously they would be a greater danger consolidated in powerful unions

[1] Mr. F. E. Lee, *Report on the Russian Co-operative Movement*, p. 7.

than they could be in isolation. Not until after the Revolution of 1905, which showed the Government the necessity of making some concessions, was progress made in this direction, and in 1908 the first All-Russian Congress was held at Moscow. Even before this, groups of co-operative societies managed to evade the law by the ingenious device of granting an unlimited power of attorney to some individual to act on their behalf, and thus secured the advantages of amalgamation without calling down upon their heads the wrath of officialdom.[1]

In recent years, however, an immense impetus has been given to the amalgamating tendency in Russian co-operation, local unions of co-operative societies have joined together to form provincial unions, and these in turn have fused to form national federations, embracing the whole country in their scope. Very full information as to this movement is to be found in a compilation entitled *The Council of the All-Russian Co-operative Conferences*,[2] where a detailed list of 888 such unions is given, including the date of formation in the case of 690 of them. The following figures, taken from page viii of the publication, show in what proportion the various types of societies have shared in this increase :

Consumers' societies	51·7 per cent.	
Credit „	9·4 „	(?7)
Agricultural „	4·5 „	
Ancillary to agriculture	1·3 „	
Industrial societies	0·2 „	
Mixed „	32·6 „	
Total	99·7 „	

Mr. Malakov, on p. 60 of his book, gives figures which he states are drawn from the above table, but the two sets do not correspond in any way.

Statistics are also given showing the number of unions formed from 1898 onwards. From that year up to 1914, they increased at a fairly uniform rate of one or two per annum, but in the years following 1914 they show a rapid increase from twenty up to 256 by the time 1917 is reached.[3] Although opinions may diverge as to the moving force behind this tendency, there can be no question as to its concrete results. Malakov, for instance, gives a list of ten national federations which control such important products as hemp, flax, grain, eggs, potatoes, fruit and vegetables, books, and there is even one dealing with insurance ; and his list does not pretend to be exhaustive.

The question of credit is inextricably bound up with this amalgamating tendency in Russian co-operation, since the more ambitious schemes undertaken by the growing unions demanded ever-

[1] Malakov, *Russian Co-operation and the Communists*, London, 1920.
[2] Edited Moscow, 1919. [3] *Op. cit.*, p. vii.

increasing sources of capital and credit. Where were these to be found? Clearly private banks were not very hopeful sources, since the ideals and aims of co-operation were far from being in line with the ideals and aims of their influential shareholders. State credit (though at first unavoidable) was undesirable, for it is no part of the co-operative programme to be dependent on the State, financially or otherwise. It was to obviate reliance on either of these two channels and meet the pressing financial needs of the movement, that the Moscow Narodny (People's) Bank was founded in 1912, with the intention of forming a national financial centre for Russian Co-operative societies, from whom exclusively it was to derive its capital, and to whom exclusively it was to dispense its credit.

In the face of conflicting statements from different authorities, it is difficult to decide to what extent the Bank succeeded in realizing its ambition, at least in the early stages of its existence, of drawing its capital exclusively from co-operative sources. Mr. P. Sadyrin, in an article in the January edition of the *Russian Co-operator* for 1919, states that on January 1st, 1917, unions of co-operative societies controlled only 8 per cent. of the share capital of the Bank; by January 1st, 1918, they controlled 68·5 per cent.; while on July 1st, 1918, 92 per cent. of a new issue of capital was subscribed by co-operative societies. Turning to p. 48 of Mr. Lee's pamphlet previously referred to, we find the statement that 85 per cent. of the original (?) share capital was subscribed by co-operative societies, and only the remaining 15 per cent. by private persons, most of whom were in some way or another connected with co-operation. Again, Prof. Shvittau, in his book, *Russian Co-operation in the International Market*, gives figures with regard to the Moscow Narodny Bank (p. 85) which can in no wise be reconciled with those of either Sadyrin or of Lee. For example, he mentions 39,353 shares as being under co-operative control on January 1st, 1918, where Sadyrin's figure is 27,415.

For the present, we must confine ourselves to stating that it is as yet impossible to view in proper perspective the true abilities and accomplishments of the Moscow Narodny Bank. Founded as it was, only two years before the outbreak of the most devastating war in history, it had no time during that short period to give a true demonstration of its abilities. The circumstances of war introduced abnormal circumstances, which make it very necessary to proceed to judgment only with the greatest caution. Hence the vast increase in its operations and capital—the latter, from one million roubles in 1912, to one hundred millions in 1918,[1] must not be taken at once as a true measure of its progress, but must be viewed in the light of external circumstances.

Another activity which the amalgamating tendency made possible on a larger scale was that of international trade. The question is

[1] Article by P. Sadyrin in the *Russian Co-operator*, January, 1919.

too broad to be gone into here, but we may mention the names of the four organizations which operate to the greatest extent on the international market. These are the "Union of Siberian Butter-producing Artels," the "Moscow Narodny Bank," the "Centrosoyus," and the Siberian "Zakupsbyt."

At present, attempts to carry on international trade between co-operative organizations are meeting with great difficulties, mainly arising from the state of economic and political chaos which prevails in Europe generally as the result of the war. Consequently the efforts of the Co-operative Wholesale Society in our country to extend credits to co-operators in other lands, has so far only resulted in heavy losses to itself, without producing any satisfactory increase in international trade.[1]

The ultimate ideal upon which co-operators set their eyes is the establishment of an "International Co-operative Exchange," to facilitate direct exchange of goods between co-operators in different countries. This body would be composed of representatives of co-operation from all over the world, and its head offices would be in London, whence it would carry out its functions of watching the state of the market, bringing co-operative buyers and sellers into immediate touch with each other, providing them with information as to freight, insurance, and so on. The idea is interesting as providing yet another illustration of the breadth of vision possessed by the leaders of the movement.[2]

RECENT EXPANSION THROUGH CO-OPERATIVE EYES.

In the June-August, 1918, edition of a monthly co-operative journal entitled "*Sibirskaya Kooperatsiya*" (*Siberian Co-operation*), there appears a criticism of the development of co-operation in Russia in recent years, written by Mr. Nil Fomin.

He starts with the paradoxical statement that the vast expansion in co-operation after the war, both from the point of view of members and of trading activities, is not an advantage to the movement, but rather a drawback; since true progress, in co-operation as in every other sphere of human activity, can only come about as the result of conscious effort, of strife, which has been lacking in the recent development of the movement.

To illustrate what is meant by this absence of effort, he proceeds to compare with this recent mushroom growth the slow natural development that takes place in normal times, and does so by describing the progress of a small co-operative society in Siberia. It had the utmost difficulty in commencing operations at all, and months of strenuous effort found it with the modest results of 100 members and 700 roubles of capital. But—and this is the point

[1] In "Co-operator's" letter in the June 4th issue of the *New Statesman*, it is stated that over £700,000 has been lost in this way.

[2] J. V. Bubnov, *The Co-operative Movement in Russia*, p. 151.

on which he lays stress—this represented a real and lasting result. These 700 roubles were definitely withdrawn from capitalistic society, against which co-operation has to engage in conflict, and were laid at the foundation of a new order of society. These 100 members were convinced, conscious participators in the struggle, they " felt themselves members of the new co-operative family, took their places in the ranks of the new co-operative army."

He then outlines the train of events which removed from the path of co-operation its enemy, private capitalistic enterprise, and opened up to it an easy road, " not to economic conquest, but seizure." The war, involving as it did the disorganization of transport, and of the currency, a general scarcity of goods, ruined private trade, and gave full scope to the speculator and the profiteer. Hence the mass of the people turned to co-operation, not from a reasoned conviction of its worth, but simply because it offered to them the only available way of escape from the universal economic chaos in which they found themselves. The banks also found their normal operations seriously curtailed, hence credit facilities were made available, which co-operation had not previously had access to. The immediate result was an enormous expansion of co-operative activity, their members and turnover increased by leaps and bounds, and the societies greatly increased their sphere of activity. Malakov confirms this where he states[1] that during the war, credit co-operation extended its operations into the domains of agriculture and industry, and undertook the provision of such necessaries as foodstuffs, clothing, footwear, to the community as a whole, and particularly to the army. For this purpose, he goes on to say, co-operative societies began to instal their own workshops and factories, while continuing at the same time their cultural and educational work.

But could this increase be called a real advance, a real victory? Both writers agree that it could not, for it was founded on fortuitous external circumstances, and not upon the conscious aspirations of the great masses of the people. While the leaders of co-operation proceeded along this path of " economic seizure," adding stretch after stretch of territory to their domain, the rank and file of the co-operative army remained in a condition of apathetic indifference and inaction and failed to understand or to share in the enthusiasms of their leaders. The peasant now carried his grain to the co-operative granary not because he had become a conscious participator in the co-operative struggle against the capitalistic " bourgeois " structure of society, but for the very simple reason that he was not permitted to carry it elsewhere. And so Mr. Fomin thinks this advance must share the fate of seed sown upon shallow soil. It may flourish for a short time, but lacks the necessary foundation for continued and healthy growth.

[1] Malakov, *op. cit.*, p. 27.

CO-OPERATION AND BOLSHEVISM.

Although the fundamental attitude of the Bolshevist regime towards the co-operative movement was one of hostility, due to the fact that its leaders considered the co-operative organization and underlying principles to be out of harmony with the organization and principles of a communist state, this hostility was, nevertheless, held in check for some time after the November revolution of 1917, by the pressing practical needs of the moment. Lenin was keenly aware that the " expropriation of the capitalists," which took place at once, was by no means the only step in his scheme.[1] There remained the problem of management, how to arrange an efficient system of production and distribution, which, in a country with the vast expanses and immense population of Russia, was not at all easy of solution. The difficulty of passing through the time of transition from a capitalist state to the organization of communism was all the greater, since the transition was being effected amid the disturbances and distresses of a long and costly war. It was, therefore, highly advisable to take advantage of already existing organizations which had proved their value under the capitalistic regime as suitable organs for the production and distribution of goods, and utilize these until the communist state was strong enough to take over all the necessary duties itself.

We can, therefore, trace two main lines in the Soviet policy towards co-operation, as shown in the series of decrees passed in connection with it from April, 1918, onwards. The first was based on the recognition of the practical value of the co-operative machinery, as a means of carrying out the essential processes of food distribution and so on ; hence co-operation was left untouched while the wholesale " nationalization " and " municipalization " of private enterprise took place. The second was based on the belief that the fundamental principles and ideals of co-operation, founded as they were on the ideas of private ownership and individual gain, were totally at variance with the fundamental principles and ideals of a communist state, founded as *they* were on the ultimate ideal of absolute equality and the " socialization " of production and distribution. And so the policy was gradually carried out of leaving the outward forms of co-operation intact, while transferring all real power and control to the Soviet government. This policy can most clearly be traced by a brief consideration of the main Decrees connected with the subject.[2]

The Decree of April, 1918, was the first attempt to " socialize " production, and to turn co-operation " from a private social movement into one involving the whole of society." According to this Decree, it became obligatory for all citizens to become members of a local commune and to purchase all necessary articles solely in the

[1] *The Soviets at Work*, Lenin.

[2] The text of the Decrees is given in *Co-operation in Soviet Russia*, by Z. Stencel-Lensky.

distributing centre of that commune. Co-operative organizations were placed under Soviet control by the creation of a central organ, the "Co-operative Department" of the Supreme Council of National Economy.

A further step was taken in the Soviet economic system by another Decree in August of the same year, laying down a scheme for the compulsory exchange of goods between the country and the town. The supply of raw materials, manufactured goods, etc., was placed in the hands of the People's Commissariat of Food and the co-operative societies; and the agricultural population only received such supplies on condition of delivering up so much agricultural produce in return. Calculations were made as to the amount of produce each province was to deliver, and how much it was to receive in return in the way of manufactured goods.

A third Decree was issued in November, 1918, with the object of completely abolishing private trade—although some steps had already been made in that direction,[1] before the Decree itself came into existence. Now, however, the formal nationalization of all wholesale stores was carried out, as was also the formal municipalization of all retail shops and firms. Private trade had finally passed into the hands of the People's Commissariat of Food. And although co-operative shops and stores were declared to be exempt from nationalization, Soviet control was in reality extended to them by the introduction of a representative of the Commissariat of Food upon the Board of the "Centrosoyus."

The last Decree for 1918 was issued in December, and was an attack on that stronghold of co-operation, the Moscow Narodny Bank. All private banks had, of course, been seized immediately the Revolution was accomplished; hence an enormous flow of deposits to the Moscow Narodny Bank, which remained as the only bank accepting deposits. But finally the principle of nationalization was extended to it also, and by this Decree it had to fuse with the People's Bank of the Soviet Republic.

Two more Decrees, one in March, 1919, and one in January, 1920, served to complete the transformation of co-operation from a free independent organization, into simply the executive machinery of the Soviet State. The first of these laid down as its aim the doing away with "the inequality of distribution through the present co-operative societies, which give preference to their members"[2] by the creation of a single distributive machine, "The Consumers' Commune." Every citizen was obliged to join the local commune, and every such commune was obliged to join the District or Provincial Union. Since a Government representative with the power of veto was introduced on to all the Boards representing these different bodies, a final blow was struck at the freedom and independence of co-operation. This destructive process was carried to completion in January, 1920, when a Decree of that date effected three

[1] Stencel-Lensky, *op. cit.*, p. 12. [2] *Ibid.*, p. 31.

main changes. In the first place, all credit and saving associations were suppressed and forced to become incorporated with the consumers' societies. Secondly, the centres of agricultural co-operation were robbed of independence and had to fuse with the Sovietized "Centrosoyus." Lastly, the "All-Russian Council of Co-operative Congresses," which carried out the organizing and educational work of the movement, was also merged in the "Centrosoyus."

This may be stated to be the final step in the realization of the Soviet policy, which was outlined as follows in a resolution adopted at the ninth Conference of the Russian Communist Party, in April, 1920: "The re-organization of co-operation from a narrower form of amalgamation of separate privileged groups of the population under the conditions of a capitalistic society, into new co-operative forms corresponding to the economic and political conditions of the dictatorship of the proletariat, and which may serve in future as a basis for the organization of supply for the population on communistic principles."[1]

But co-operators, while admitting material defeat, adhere staunchly to a belief in the spiritual survival of their cause. They consider that theorists, with the strong arm of despotism to enforce their doctrines, have endeavoured to put into practice a scheme of organization which is at variance with economic laws and the attributes of human nature. Trade must be a voluntary process, based upon the laws of demand and supply, and not simply a "compulsory exchange of goods." Man's innate sense of property, his instinct for individual gain, must break through the artificial barriers of communistic equality. And, they maintain, in this inevitable revival of free, natural, economic life, co-operation will come forward as an indispensable feature of economic organization in a country like Russia, where 80 per cent. of the population consists of peasants, cultivating the land which they own themselves. They look forward, therefore, to a resumption of more rational conditions in their distracted country, when co-operation will rise from the ashes of its present desolation, and take its place as a vital factor in the economic, social, and cultural life of the Russian people.

[1] Stencel-Lensky, *op. cit.*, p. 52.

Recent Official Statistical Publications

By A. L. Bowley,
Professor of Statistics, University of London.

In the autumn of 1919 a petition was presented to His Majesty's Government, signed by the president and a number of members of the Royal Statistical Society, by representatives of other societies and of local authorities and others, asking for a public enquiry into the existing methods of the collection and presentation of public statistics. The petition was referred to a committee consisting of ten officials (in most cases the chiefs of the statistical sections of Government Departments), whose report to the Cabinet was published in June (*Report on the Collection and Presentation of Official Statistics*, 1921, price 1s.). This document is extremely interesting from many points of view, not only to statisticians but to all interested in official procedure and in departmentalism in practice. The officials evidently considered that the petition was an attack on them and did not recognize that it was a criticism of the system under which it was their misfortune to find their efforts frustrated, and most of the pages of their report are devoted to showing that they have carried out their statutory duties. They meet the statements in the petition that " it is generally recognized . . . that official statistics, as at present collected and published, are inadequate in arrangement and scope for the purposes they should serve," and that there is " urgent need of a re-organization of the present system of official statistics as the foundation of a proper system of civil intelligence," by saying that the proposition that the Government has responsibility with regard to statistics covering the whole life and activities of the community has never been accepted in this country and no provision is therefore made by the national machinery of administration to discharge such an obligation. It is, of course, precisely the want of this acceptance and this provision that is at the root of the various serious defects of the public statistics of the United Kingdom which the petitioners desired should be investigated.

The report proceeds to show, by reference to the findings of a former official committee in 1877, that the establishment of a Central Statistical Office is impracticable, and finally recommends the setting up of a permanent Consultative Committee of statistical officers for the purpose of ensuring more effective co-operation and co-ordination between the different departments. This Committee has now in fact been organized with Sir Alfred Watson, the Govern-

ment actuary, as chairman. If the recommendations are followed, it is "empowered to initiate discussion upon any question affecting official statistics, and at its discretion to consult any person or organization whose advice and opinion it is desired to take." No person, however, has any "right of direct approach to the Committee, but should, as heretofore, submit their views to the Government Department concerned." We may add that, as heretofore, the Department concerned is under no obligation to pay any attention to their views nor to admit that it is concerned, nor need it bring these views to the attention of the Committee; and if the person who has views is unable to find any Department that is concerned he has no right to do anything in the matter. Nor has the Committee any power to report to Parliament; it is to submit an annual report of its proceedings to the Cabinet Secretariat for circulation to the Departments interested. If, as may well be sometimes the case, the Department is not interested, it need apparently take no action in the matter. At any rate the inquisitive public is carefully warned off the official preserve and must continue to be satisfied with such information as the Departments functioning behind closed doors choose to give them. Nevertheless the formation of this consultative committee is a definite step forward; there will be live men on it who strongly desire the improvement of statistics and will have an official status from which they will derive official power.

We can learn something of the possibilities of properly organized public statistics and also of the chaotic state of information on many of the most pressing world problems of the day from, on the one hand, the *Official Year Book of the Commonwealth of Australia*, 1920, and the *New Zealand Official Year Book*, 1920, and on the other hand, from *Labour Overseas*, published quarterly by the Ministry of Labour,[1] and from the *International Labour Review*, issued monthly by the International Labour Office, Geneva.[2] New Zealand, Australia, Canada and South Africa have apparently accepted the responsibility of the Government with regard to the publication of information, and especially in New Zealand the range of statistics includes the great majority of subjects (with the exception of incomes) about which statisticians have been able to devise measurements. We notice that there is no material for computing marriage and birth-rates corrected for the varying distribution of the age, sex and marriage constitution of the populations, nor has the problem of allowing for modification of diet in the construction of cost of living index-numbers been tackled, nor is any measurement given of the quantity or volume as distinct from the value of external trade; otherwise the best and most modern methods appear generally to be used. The Australian volume is unneces-

[1] Vol. I, No. 4, January to March, 1921, is the most recent to hand.

[2] Vol. I, Nos. 1, 2 and 3, and Vol. II, No. 1, all of this year, have been published.

sarily large and diffuse ; it contains 1,182 large octavo pages and serious attention might well be given to the elimination of all material that is not essential and informative. In South Africa a *Quarterly Abstract of Union Statistics* is published, and No. 6, April, 1921, contains information for 1920 and in some cases for the first three months of 1921. *The Canadian Year Book* for 1920 has not yet been received. The statistics of production are in all cases more complete than those available for the United Kingdom, not only in regard to agriculture and land, where we have statistics of wool, timber and dairy produce, but also for manufactures ; the main features of the solitary Census of Production of the United Kingdom of 1907 are reproduced annually in New Zealand, and less completely in the other countries.

The main point to which we wish to call attention is that the Self-governing Dominions have recognized the importance of co-ordinating and publishing information which covers in a remarkable way the measurable " activities of the community," while in the United Kingdom the public statistics (though admirable in some respects) are unco-ordinated and irregular. A student would obtain much insight into the nature and method of presentation of statistics by comparing these Year Books with the Statistical Abstract of the United Kingdom. The latter leaves Labour statistics to the Ministry of Labour, who seem now to be unable to issue an annual report, and compresses almost to the point of uselessness most statistics except those of revenue and foreign trade. The former do not give simply bare tables, but also explanatory and historical matter, so that they are intelligible to others than those who have already studied the more detailed original reports. All, however, fail in one very important respect. Everyone who uses statistics seriously is aware that the meanings to be attached to such words as exports, prices, wages, emigration, depend on a number of technical considerations of collection, method, compilation and administration ; it is quite exceptional to find these words or their translations used in precisely the same sense in different countries. Statistical tables are consequently of little value unless with them is given an adequate statement of the nature and scope of the investigations on which they depend, the methods by which the known difficulties in each field of enquiry have been overcome, the technique of the averages, and the precise meaning to be attached to all the terms. In the Statistical Abstract no information of this kind is given, but there are adequate references to the original reports. In the Year Books before us the definitive statements are inadequate, but it would need little alteration in form to improve and complete them. It should be added, however, that intensive studies must in any case be made from the special reports, on which all Year Books are based, and many of these give sufficiently explicit references.

Year Books are necessarily historical, and for current accounts

we must look elsewhere. In *Labour Overseas* are brought together items of information from a great number of countries relating to wages, prices, hours, labour organization and legislation. The main part of the publication is in the form of notes from various official and unofficial sources arranged under countries. These notes are suggestive and informing up to a point, but the statistics are so compressed and with such imperfect headings, and references to sources are so rare, that it is very difficult to make any use of them. No general conspectus can be obtained and the enquirer in any subject would be compelled to sort out details painfully for himself and in the end admit that the information is so sporadic as to be nearly useless. But no student of foreign labour movements can afford to neglect the sources of information here opened up. The reason for the unsatisfactory nature of *Labour Overseas* as a statistical handbook can be found by reference to *The International Labour Review*, in which some attempt is made to bring together the statistics of prices and of employment. It is evident that there is little that is common in method, definition or date of presentation in the Labour statistics of the different countries, and that there are few serious and successful efforts to make the information on a given subject in any one country complete and intelligible. *The International Labour Review* has the ambitious programme of " bringing together the statistical and other briefer scientific information regarding labour and industry from all nations." It contains some general articles, some detailed studies of particular movements and some statistical matter. Among the last named we find comparative statements of unemployment in many countries, with the caution " while these figures cannot be used as a measure of the total unemployment *in* a country, still less can they be used for comparing the volume of unemployment *between* two and more countries " ; but it is held that they can be used for showing the increased stress of want of work, and the following figures are given :

	Percentage Unemployed.		
	Feb., 1920.	Jan. or Feb., 1921	
Canada	4·3	13·1	
Denmark	9·6	23·2	
Norway	2·4	10·5	
Sweden	7·5	20·8	
Massachusetts	3·8	29·2	(Dec., 1920)
United Kingdom :			
Trade Union	1·6	8·5	
Insurance	4·4	9·5	

No doubt we can affirm that the position was more serious in 1921 than in 1920, but we cannot give any measurements that compare the condition in two countries, as may be seen from the ambiguity of the statements for the United Kingdom ; on one reckoning the percentage unemployed has increased 6·9 and is over fivefold, on

the other the increase is 5·1 and the percentage has little more than doubled.

One of the important tasks of the International Labour Office is no doubt to interpret the existing figures emanating from various countries, so that a student at any rate will know what has been counted, and to sift out those which are complete and comparable from the others. The chaotic character of the Notes in *Labour Overseas* shows the necessity of these processes. Another task, needing infinite perseverance, is to persuade the countries to give adequate explanations of their methods, and to bring them to a common basis. Much progress in this direction has been made with regard to trade and to population statistics by the Institut International de Statistique, which is now publishing a series of very important volumes containing well documented comparable statistics for a very wide range of countries (e.g., *Annuaire International de Statistique*, 1920, VI, Van Stockum & Fils, La Haye, 6 francs) ; a great deal of improvement in the comparability of the statistics of the British Empire (outside the United Kingdom) may be expected to result from the conference last year of Imperial Statisticians, and the admirable Year Books already named may attain the final virtue of comparability ; something may be expected by those who are young and sanguine from the new official committee in this country. But there is a great risk of dissipation of the scanty funds and the labours of the small number of competent statisticians available for the task. We have the International Institute of Agriculture at Rome, the International Labour Office at Geneva and the Institut International de Statistique at The Hague, functioning independently ; the Ministry of Labour in London issues *Labour Overseas*, the Supreme Economic Council is responsible for a *Monthly Bulletin*, and many countries include international comparisons in their periodic issues. The frequent repetition of the same figures (such as the cost of living index-number of the *Labour Gazette*) tends to give them an appearance of completeness, relevance and accuracy, to which they have little title, and the whole mass of statistics may be dangerously misleading to those who have not the opportunity or ability to criticize them at their source.

School Notes

Staff

Miss E. E. Power, Hist.Trip., Cambridge, late Pfeiffer Fellow and Lecturer and Director of Studies in History at Girton College, Cambridge, has been appointed to the General Staff of the school as Lecturer in Economic History.

The following have been appointed to Assistantships :

Mrs. Anstey, B.Sc. (Econ.) (Lond.).
Miss E. M. Richardson, B.Sc. (Econ.) (Lond.).
Mr. L. G. Robinson, B.A., New College, Oxford.
Mr. K. B. Smellie, B.A., St. John's College, Cambridge.

Students

The total number of regular, or full-time, students enrolled for the session 1920-1921 was 978, of whom 349 were working for the B.Sc. (Econ.), 238 for the B.Com., and 47 were Research Students working for Higher Degrees, such as the D.Sc., Ph.D., and M.Sc. There were, in addition, 1,923 occasional, or part-time, students, making the total of all students who attended the school last session 2,901. There were 354 foreign and colonial students, representing some 30 nationalities.

The degree of Ph.D. was conferred in July on V. Y. Chiu and S. G. Panandikar ; and the degree of M.Sc. was conferred on B. R. Ambedkar, W. A. Orton, and C. N. Vakil.

Ten students obtained the Academic Diploma in Sociology and Social Administration, and five students the Academic Diploma in Geography.

Studentship

A School of Economics Research Studentship has been awarded to Mr. F. Morley, of New College, Oxford.

Public Lectures

The following lectures, which are open to the public without fee, have been arranged :

" Economics and Happiness," by Sir Arthur Steel-Maitland, Bart., M.P. (Chairman of the Court of Governors), on Monday, October 3rd, at 5 p.m.

" Indian Economics," by G. Keatinge, C.I.E., late Indian Civil Service, on Wednesday, October 5th, at 3 p.m.

" The New Methods of Long Distance Communication and their Probable Economic and Political Effects," by Sir Halford Mackinder, on Thursday, October 6th, at 5 p.m.

" Foreign Relations and International Law," by Professor Pearce Higgins, on Wednesday, October 12th, at 5 p.m. Viscount Cave will take the Chair.

" The Administrative Factor in Government," a course of four lectures, by Sir J. C. Stamp, on Tuesdays, at 6 p.m., in Lent Term, beginning February 14th.

(*Admission free, by ticket.*)

Books Received

R. H. Tawney: *The Acquisitive Society.* Messrs. Bell and Sons.
Carnegie Endowment for International Peace:
Prof. A. B. Keith: *War Government in the British Dominions.*
J. A. Salter: *Allied Shipping Control.*
Prof. A. L. Bowley: *Prices and Wages in the U. K.*, 1914-1920. Oxford Univ. Press.
Percy and Albert Wallis: *Prices and Wages.* P. S. King and Son.
Ludwig Mises: *Natur, Staat und Wirtschaft.* Manzsche Verlags-Buchhandlung.
Walter Jones: *Capital and Labour.* P. S. King and Son.
Riccardo Bachi: *L'Italia economica nel* 1919.
Gibson and Kirkaldy: *British Finance*, 1914-21. Pitmans.
Grier and Ashley: *British Labour: Replacement and Conciliation*, 1914-21. Pitmans.

Periodicals and Pamphlets

Zeitschrift für Oeffentliches Recht.
L. Mises: *Die Wirtschaftsrechnung im Sozialistischen Gemeinwesen.*
L. Mises: *Zur Klassifikation der Geld theorie.*
Dr. R. Kershagl: *Die Währungs Trennung in den Nationalstaaten.*
Zeitschrift für Volkswirtschaft und Sozialpolitik.
Metron.
Mitteilungen des Verbandes oesterreichischer Banken und Bankiers.
The Latvian Economist.
Sociological Review.
Political Science Quarterly.
The Journal of International Relations.

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